

# Task Order 00006 - Qabatiya Well, Pump Station and Conveyance System

# Monthly Progress Report # 33

# For the Month of February 2016

This publication was produced for the United States Agency for International Development, West Bank and Gaza Mission. It was prepared by CDM Smith under Contract No.: IQC No. AID-294-I-00-12-00001.

Relative to Order No.AID-294-TO-13-00006.

Views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.



# **Table of Contents**

1.	DASH	BOARD - INTRODUCTION AND SUMMARY	
	1.1 Pur	pose and Background	
		ectives of Task Order 00006	
	=	rk/Activity Status	
		r Information	
2.	DDOI	ECT ADMINISTRATION	-
۷.			
	2.1. 2.2.	Submission of Most Recent Monthly Report	
	2.2. 2.3.	Staff Information	
3.	ACCO	DMPLISHMENTS	
	3.1.	Accomplishments	
		.1. General, Overall and Project Wide	
		.2. Submittals for Task Order 00006	
	3.2.	Labor and Equipment	
		2.1. Geo MIS	_
		2.2. Project Beneficiaries	
		2.3. Equipment	
	3.3.	Meetings and Correspondence with USAID	
	3.4.	Meetings and Correspondence with CMC and Subcontractors	
	3.5.	Procurement/Subcontract Actions	
	3.6. 3.7.	Quality ControlSafety	
	3.7. 3.8.	Environmental	
	3.9.	Public Relations	
	3.10.	Project Permitting & Security	10
4.	SCHE	DULE	10
	4.1.	Progress vs. Planned	10
5.	OUTL	OOK FOR NEXT REPORTING PERIOD	10
	5.1.	Planned Submission of Next Invoices	10
	5.2.	Planned Activities Anticipated During March 2016	10
	5.3.	Planned Staff Changes	10
	5.4.	Planned Meetings and Correspondence with USAID	11
	5.5.	Planned Meetings and Correspondence with CMC	11
	5.6.	Planned Meetings and Correspondence with Others	11
6.	ISSUE	ES AND CONSTRAINTS	11
	6.1.	Administration	11
	6.2.	Qabatiya Conveyance System :	11
	6.3	Qabatiya Well Site	11
	6.4	Others	11
7.	APPE	NDIX	12



# List of Acronyms and Abbreviations

ANSI American National Standards Institute

ASQ American Society for Quality

AWWA American Water Works Association
CMC Construction Management Contractor

CQC Contractor Quality Control

CSMP Construction Safety and Health Management Plan

EPA Environmental Protection Agency
EQA Environmental Quality Authority

HSWA Federal Hazardous and Solid Waste Amendments

HSE Health Safety & Environmental

IADC International Association of Drilling Contractors

ISEA Industrial Safety Equipment Association

IQC Indefinite Quantity Contract

ISO International Organization for Standardization

MIC Man in Charge

NCR Non Conformance Report

NUC Notice of Unsafe Conditions

OSHA Occupational Safety and Health Administration

PA Palestinian Authority

PWA Palestinian Water Authority
PPE Personal Protective Equipment

QCP Quality Control Plan

QMS Quality Management System
RCS Radio Communication System

RFI Request for Information

SCADA Supervisory Control and Data Acquisition

TDY Temporarily Deployed for a Year

USAID United States Agency for International Development

WP Work Plan

WBWD West Bank Water Department
WEF Water Environment Federation





# 1. DASHBOARD - INTRODUCTION AND SUMMARY

Monthly Report No.33 covers activities accomplished during the month of February 2016 and previews activities anticipated during the next month, March 2016.

## 1.1 Purpose and Background

The USAID West Bank and Gaza Infrastructure Needs Program II (INP II) is designed to support U.S. Government efforts with the peace process by improving Palestinian access to basic infrastructure and services throughout the West Bank, and if conditions and funding permit, in Gaza.

Infrastructure in the West Bank and Gaza suffers from years of neglect and lack of investment. The USAID Mission INP II focuses on the rehabilitation and construction of roads, schools, water, and wastewater projects. The USAID objective is to help the Palestinian economy by improving Palestinian access to basic infrastructure and services.

## 1.2 Objectives of Task Order 00006

The objective of this Task Order is to develop, rehabilitate and improve an existing well at Qabatiya and to install and equip that well with a new pump and appurtenant equipment. The Task Order also includes construction of a conveyance system that will connect the Qabatiya Well to Al-Zababdeh junction.

# 1.3 Work/Activity Status

The percent complete, Start and Finish information for each major component is shown on the following table.

Activity Name	Percent Complete	<u>Planned Start</u> Actual Start	<u>Planned Finish</u> Actual Finish
Preconstruction Coordination with PWA	100%	14 May 2013 14 May 2013	18 June 2013 18 June 2013
Mobilization	100%	14 May 2013 14 May 2013	25 June 2013 25 June 2013
Submittals	98%	14 May 2013 14 May 2013	<u>15 January 2016</u> <u>TBD</u>
Procurement and Delivery	100%	26 August 2013 26 August 2013	31 January 201631 January 2016
Construction Phase	96.73%	19 June 2013 19 June 2013	20 February 2016 20 February 2016
Post Construction Phase	0%	21 February 2016 21 February 2016	<u>5 March 2016</u> <u>TBD</u>



# 1.4 Key Information

Contract Number: AID-294-I-00-12-00001

Task Order Number: AID-294-TO-13-00006

Notice to Proceed: 14 May 2013

Project Original Duration: 550 Days

Project Original Completion Date: 14 November 2014

BOQ Item Original Amount: \$6,858,760.00

Day Work Original Amount: \$850,000.00

Original Contract Value: \$ 7,708,760.00

Project Modified Duration: 1027 Days

Project Modified Completion Date: 5 March 2016

BOQ Item Modified Amount: \$ 10,646,204.92

Day Work Modified Amount: \$63,790.08

# 2. PROJECT ADMINISTRATION

This Task Order is one of several task orders through which the USAID West Bank and Gaza Infrastructure Needs Program II (INP II) that is designed to improve Palestinian access to basic infrastructure and services throughout the West Bank. Some activities detailed in this report share a common base with the overall project or other Task Orders.

# 2.1. Submission of Most Recent Monthly Report

This document is the thirty-three in a series of Monthly Reports to be prepared by CDM Smith providing a summary of key project activities during consecutive monthly reporting periods.

#### 2.2. Submission of Most Recent Invoices

CDM Smith submitted invoice No. 11 and is currently preparing invoice # 12. The following table is a summary of the current invoice status.

New BOQ Amount	\$ 10,646,204.92	
New Day Works	\$63,790.08	
Amount Obligated	\$10,709,995.00	
Variation Orders/ Modification Amount	\$3,787,444.92	
Task Order Amount ( BOQ +DW)	\$10,709,995.00	
Most Recent Invoice	\$ 4,454,629.57	
Invoiced to Date	\$ 6,399,805.89	





#### 2.3. Staff Information

At the end of this reporting period, 29<sup>TH</sup> February 2016, 16 team members are working on the overall project and other Task Orders in the West Bank. Following are some key Task Order and support staff for the project:

Anthony Mirabella VP and IQC Manager

Amy O'Connell Civil Engineer/Contract Specialist

Kevin P. Connors Senior Project Manager

Ghassan Thaher Task Order Manager - Key Personnel
Abdel Rahman Bakeer Safety and Environmental – Key Personnel

Talal Mahasin QA/QC Manager – Key Personnel

Abed Ahmad Office Assistant/CMC Office Al-Zababdeh

Yazan Meqbel Project Engineer

Tamadour Abu AL Rub Document Control Officer

Mousa Anbar Finance and Administration Manager

Renad Nafee Finance Assistant Manager

Hiba Othman Admin Assistant

Anas Abu Sneineh Security and Logistic Manager

Murad Abu Nasrah Office Assistant

Ali Odeh Project Engineer (Scheduler and Controller)

Ghaleb Daraghmeh Mechanical Engineer

The following specialty staff from CDM Smith is still supporting the project activities from CDM Smith home offices in USA and spent a significant time during the reporting period in the West Bank:

- Mr. Tony Mirabella who serves as IQC Manager for the overall project and is a Senior Vice President of CDM Smith. Mr. Mirabella communicates with the West Bank team on daily basis. Mr. Mirabella is following all work activities that take place at this project in communicating via emails and daily phone calls.
- Ms. Amy O'Connell Civil and Environmental Engineer of CDM Smith continued coordinating with West Bank Staff.
- Mr. Kevin P. Connors who serves as a Senior Project Manager is communicating with West Bank Team to be updated for ongoing progress of Qabatiya Project. Moreover, Mr. Connors is directly involved in finalizing and evaluating all variation orders and modification # 1 received for the project. An agreement was signed between CDM Smith and a local electro-mechanical office to support the team in electrical activities.

# 3. ACCOMPLISHMENTS

Following is a summary of significant meetings, correspondence and submittals within this reporting period.

# 3.1. Accomplishments

Following are key accomplishments for the reporting period.

#### 3.1.1. General, Overall and Project Wide

During this reporting period the following construction activities were performed and /or progressing:





- FC Dekguard painting for the external walls of both balance tank and well buildings is completed. Moreover, the internal painting for the well buildings is completed.
- Finishing works for the living quarter, chlorination, metering and electrical & control buildings are completed.
- The numbering of electrical wires and cables is completed.
- Pre-commissioning and commissioning stages for Qabatiya well system are successfully completed including the well pump and all associated equipment, booster pump (including surge tank and all related control system), chlorination system and others.
- Training material and sessions (field and classroom) were conducted for PCIS (Process Control and Instrumentation System).
- Asphalt works for conveyance system, well yard and entrance were completed.
- Continue working on close-out submittals (record drawings).
- Installation of Chlorination system inside the chlorination room is completed.

#### 3.1.2. Submittals for Task Order 00006

Construction submittals continued during this reporting period. Some of the main construction submittals during this reporting period are listed hereunder and included in the attached updated submittal log.

A summary of significant submittals follows, however a table covering all submittals for the reporting period is included in the Appendix:

- Completion of the pre-construction submittals.
- Continue of the following construction submittals:
  - Test certificate of portable air compressor;
  - Degree of compaction test (field density -sampling date Feb 1st, 2016) Ref. No: M/1602/3;
  - Degree of compaction test (field density ) for the base coarse layer blow concrete sidewalksreport Ref.No:M/1602/22;
  - Updated risk management plan for January 2016;
  - Monthly updates for environmental monitoring and mitigation plan for January 2016;
  - Updated CPM Schedule until 31 January 2016;
  - Factory Test Report for the Surge Tank;
  - Monthly QA/QC and Safety Plans Updates for January 2016;
  - Degree of compaction test (field density) for the base coarse layer below interlocking sidewalks Tiles -report Ref. No: M/1602/100;
  - Test Report on Concrete Compressive Strength for Fence wall footing transformer pads(1&2)& well metering pad--7 &28 Day Result ) Ref: BM/38203;
  - Test Report on Concrete Compressive Strength for top parts of transformer pads(1&2)--7
     &28 Day Result ) Ref: BM/38227;
  - Test Report on Concrete Compressive Strength for SOG of booster station & western part of fence wall-7 &28 Day Result ) Ref: BM/38322;
  - Test Report on Concrete Compressive Strength for BT inlet metering pad-7 &28 Day Result )
     Ref: BM/38357;
  - Test Report on Concrete Compressive Strength for wellhead pad-7 &28 Day Result ) Ref: BM/38356;
  - Updated Submittal Registry (up to Jan 31 2016);
  - Test report of flexural strength & dimension of concrete curbstone Ref: M/1602/50;





- Final Operation & Maintenance Manual for Section 32: Step-up Transformer (Draft);
- Motor insulation test;
- Cable insulation test;
- Chemical and microbiological analytical report for 1000 m3 Qabatiya water balance tank;
- Final Operation & Maintenance Manual for Section 17: Booster Pumps & Electric Motors;
- Final Operation & Maintenance Manual for Section 30: Medium Voltage Switchgear;
- Certification of proper installation for the surge bladder tank;
- Coordination Study for Equipment and Instruments of Qabatiya Well Pump Station;
- Final operation & maintenance manual for section 18:Submersible well pump;
- Test Report on Concrete Compressive Strength for slab on grade around balancing tank & electrical metering building--7 Day Result ) Ref: M/1602/124;
- Final operation & maintenance manual for section 28: Variable frequency drive of well pump;
- Final operation & maintenance manual for section 29: Variable frequency drive of Booster pump;
- Final operation & maintenance manual for section 33: Step-down transformer;
- Revised CPM Schedule up to 2 Feb 2016;
- Preliminary Operation & Maintenance Manuals (Sections 6, 8, 10 & 45);
- Results of field testing & inspections for instruments of Qabatiya pump station;
- Test Report on cement block for paving (interlock block), Ref.: M/1602/134 & M/1602/134a;
- Method statement of concrete side walk;
- As Built drawing for 1000m³ water balance tank;
- Smoke detector- Alternative;
- As Built drawing for living Quarter building (Civil, Electrical & Mechanical);
- Preliminary Operation & Maintenance Manual for Section 34: MCC;
- Test Report on Concrete Compressive Strength for rig and blow-off pads--28 Day Result )
   Ref: M/1601/344a;
- Test Report on Concrete Compressive Strength for Booster station walls& transformer (TR-01)pad--7 &35 Day Result ) Ref: BM/CT/16020-A;
- Preliminary Operation & Maintenance Manual for Section 31: PLC;
- Final operation & maintenance manual -Section 1,7,19,24 &39 Gate Valve, Ball valve, Bladder Surge Tank, Adjustable Pressure Switch & Fire Alarm System;
- Pre-commissioning test forms observations for Booster pump at Qabatiya well pump station;
- Commissioning Observations for Booster pump at Qabatiya well pump station;
- Performance test for Qabatiya well Submersible pump;
- Performance test for Qabatiya Booster pumps (P-310& P-320);
- Instrumentation & power cables (Alternatives);
- Results of field testing & inspections for (cable insulation and earthing) at Qabatiya pump station;
- Tack coat test (RC)-Report Ref. No: M/1602/422;
- Sample of interlocking block tiles;
- Preliminary operation & maintenance manual of chlorination system components;
- Training Materials(PLC,HMI and Operators field training);
- Preliminary O&M Manual for Medium voltage switchgear;
- Training outline for the submersible deep well pump and Trainer's CV;
- Mechanical shop drawing for washout drain pipes to Wadi adjacent to QBW pump station;





- Local maintenance facility qualification- for Qabatiya Booster Pumps;
- As Built drawings for Qabatiya Conveyance system;
- Shop drawing for SS 316 grating for 1000m³ balance tank pits;
- Angle Support & wedge anchor for grating support;
- Panel Boards / product data and shop drawings.

#### 3.2. Labor and Equipment

#### 3.2.1. Geo MIS

All Implementing Partners working for the West Bank and Gaza Mission track and record labor (work force) data relative to employment of Palestinian people. The Geo MIS system includes assignment of a job classification to each worker and summation of Job Days for each classification on the project. The following table includes the Geo MIS data recorded and submitted to the Mission relative to the reporting period.

- The total cumulative generated Man-Days previously 15219.14
- The total cumulative generated Man-Days current period 785.45
- The total cumulative generated Man-Days up to date are 16004.59
- Female employment generated previously 706.125
- Female employment generated current period 25
- Female employment generated up to date is 731.125
- The total cumulative previously 15925.27
- The total cumulative current period 810.45
- The total cumulative up to date is 16735.72

#### 3.2.2. Project Beneficiaries

Total number of Beneficiaries is 78,140:

	Number of Male Beneficiaries	39687,3	Male = $50.79\%$
•	Number of Female Beneficiaries	38452,7	Female = 49.21%
•	Male Beneficiaries to Age 17	18748,3	47.24%
•	Female Beneficiaries to Age 17	18165,05	47.24%
•	Male Beneficiaries 18 to 25	6262,65	15.78%
•	Female Beneficiaries 18 to 25	6067,83	15.78%
•	Male Beneficiaries 26 and older	14676,36	36.98%
•	Female Beneficiaries 26 and older	14219,8	36.98%

#### 3.2.3. Equipment

Equipment List used during the reporting period is attached in the Appendix.

# 3.3. Meetings and Correspondence with USAID

No CO meeting was held during the reporting period.

# 3.4. Meetings and Correspondence with CMC and Subcontractors





- Saturday Feb 6<sup>TH</sup>.2016: Kick-off meeting with ABC, IC System, BHI representative to check all items related to the pre-commissioning, commissioning, startup and testing of the installed well pumping system.
- Thursday Feb 11<sup>TH</sup>.2016: Bi-weekly meeting # 47 was held at the Engineer's primary field office.
- Thursday Feb 18<sup>TH</sup>.2016: Technical coordination meeting with BV and USAID.

## 3.5. Procurement/Subcontract Actions

- The first subcontract that has been awarded to Site Group Company for the development of Qabatiya Well includes the removal of the existing submersible pump, fishing for the fallen pump (which was successfully completed) and installation of the new submersible pump which was successfully completed on Jan 13<sup>TH</sup>.2016 in the presence of BHI representative. The second subcontract to Arab Brothers Contracting Co. for the installation of the conveyance system and construct all civil, mechanical and electrical works related to Qabatiya Well Site has been amended to include the VO's received from USAID.
- A subcontract has been awarded to MOREX 71 LTD. Institute for Non-Destructive Testing to do all the required Radiographic testing for this project.
- Purchase Orders were issued for all long lead items and equipment; control system (hardware & software), motor control center, medium voltage Switch gear, column pipes and access monitoring PVC pipes, padmount transformer, hydro-pneumatic surge tank, VFDs for booster pumps, vertical turbine booster pumps, vertical turbine deep well submersible pump and disinfection system including eyewash/shower.

## 3.6. Quality Control

The Quality Control Manager prepared updated monthly submittal register log and Quality Control Plan. He also worked with Subcontractors to review and prepare subcontractors' QC plans. Request for Information log is also prepared. Moreover, some pending site memoranda related to non-complying construction works were addressed after performing the required corrective measures and other are progressing. Please see the attached updated logs.

During this reporting period; CDM Smith's QC/QA Manager coordinated a site visit by HCL lab technicians on the assigned dates to:

- Monday Feb 1<sup>ST</sup>.2016: HCL technician collected samples of compacted base course for the subgrade of the well entrance and under the sidewalk.
- Wednesday Feb 3<sup>RD</sup>.2016: HCL technician collected sample of curbstone delivered to Qabatiya
   Well from (to perform flexural strength & dimension of concrete curb stone)
- Thursday Feb 4<sup>TH</sup>.2016: HCL technician collected samples of concrete for the slab on grade around balancing tank and electrical metering building.
- Saturday Feb 20<sup>TH</sup>.2016: HCL technician collected samples of RC coat and asphalt mix along the conveyance system.
- Saturday February 27<sup>TH</sup>.2016: HCL technician collected samples of RC coat and asphalt mix along the conveyance system.
- Sunday February 28<sup>TH</sup>.2016: HCL technician collected samples of compacted base course under asphalt layer at the well yard and entrance.
- Monday February 29<sup>TH</sup>.2016: HCL technician collected samples of MC primer coat and bituminous asphalt mixtures for the well yard and entrance.





Moreover, the CDM Smith's Quality Control Manager continued follow up inspection requests procedures and made sure that the three-phase inspection as well as the MRR (material receiving report) is being successfully implemented.

All welding works implemented under the direct supervision of QC/QA Manager and the attendance of the approved CWI.

In addition to that, CDM Smith's Quality Control Manager made sure that all materials and material's sample delivered and /or submitted to CMC are in line with Contract's documents and specifications.

## 3.7. Safety

CDM Smith's overall objective, along with USAID and the CMC, is to implement a Health and Safety Program that will reduce the number of injuries, exposures, and illnesses to an absolute minimum. Our mutual goal is ZERO accidents, exposures, and injuries. To date, we have succeeded in achieving no serious injuries. CDM Smith's Site Safety engineer on daily basis and before start any activity check all safety tools, PPE, fire extinguishers, and first aid box, also he reminded and updated the labors to follow up the safety procedures, regulations and lessons Learned.

As Qabatiya well pump station project is in the final stage and most of construction activities are electrical and finishing works, CDM smith's safety engineer had checked the proper lockout / tag out and procedures to safeguard workers - as per OSHA requirements - to avoid any unexpected accident

CDM Smith's Site Safety engineer conducted tool box trainings on February 17<sup>th</sup> where technical safety topics were reviewed including the overall safe work procedures at Qabatiya Pump Station, the method of entry, exit, emergency cases, evacuation procedures, housekeeping, and the importance of using safety tools during the activity works.

CDM Smith's Safety Engineer conducted follow-up toolbox meetings in order to remind the labors of the importance of housekeeping and removing the surplus materials such as paintings' cans, concrete rubbish, etc. will be dumped as usual to the approved areas.

#### **Lessons Learned**

The prospect of getting into an accident is something no one likes to think about, and often we believe it can never happen to us. Only through training, monitoring, daily oversight, and the use of appropriate personal protective equipment (PPE), can we work to avoid accidents. As part of our culture of "Safety First", CDM Smith conducts regular safety related toolbox talks and employs an experienced Safety Engineer to lead these efforts. The incident that was happened is an important lesson in the importance of daily vigilance on all matters related to site safety.

CDM Smith and our Subcontractors will continue reviewing safety plans with site staff on a regular basis, and confirm that any new laborers are properly trained and outfitted with adequate PPE. Furthermore, because our team followed safety procedures and had the proper first aid kits on site, the employees involved in this incident were treated immediately.

Lesson learned 1

Daily Inspection for the safety tools = make the work activities easier and safer for all team works.

Lesson learned 2





#### TIDY SITE = SAFE SITE

Lesson learned 3

Updating the labors with safety regulations and emergency No. = will reduce a/o prevent incident.

Lesson learned 4

Proper tools, wearing PPE to achieve the activities = prevents or minimizes injury or illness to the user.

#### 3.8. Environmental

The Area surrounded by Qabatiya well is classified as agricultural; it has been planted by local farmers with seasonal vegetation. However, the pipeline was implemented along the shoulder of the high way that was constructed by the USAID few years ago. The main objective of the project is to alleviate pressing shortages in water supply services in the towns of Qabatiya & Al-Zababdeh in addition to parts of Jenin City by supporting strategic investments in water wells, balancing tanks, booster pumps and conveyance systems. No major negative environmental impacts are envisaged since the project was invested in activities that support rehabilitation and improvements of infrastructure and service delivery. No land acquisition is required and the works constructing through the public right of way. The Potential negative impacts that were localized and limited in nature had been avoided by providing instructions in the contract documents that specifically address environmental issues in a manner acceptable by the contractor and the CMC, as well as following Good Management Practices during construction. More attention will be given to the use and disposal of hazardous chemical materials used in the construction like epoxy for water proofing works in reservoirs, chlorine used for the disinfection of water lines, and concrete additives. More attention will be taken to avoid the risk of soil erosion due to excavation activities. This is a significant impact especially in high sloped sections (If any exists).

The new main pipeline will replace the old existing one; the water discharge rate will not significantly change, thus no significant increase in wastewater amount will appear due to implementing Qabatiya project. Cesspits and septic tanks in the served communities will be adequate to carry the generated wastewater amounts.

Qabatiya project will not have any long-term adverse impacts on the natural or physical environment.

Finally and on monthly basis the environmental mitigation plan was updated and submitted to CMC considering any potential for adverse impact, also environmental check list is covering any missing item that were not considering or mitigated properly.

Qabatiya project is very close to completion as well as the activities at the well site are restricted in a finishing works of buildings and site leveling therefore the surplus materials such as paintings cans concrete rubbish, etc. will be damped as usual to the approved area.

At the beginning of the project an environmental plan was prepared according to the project specifications and submitted to the CMC and got approved, during this reporting period some Environmental activities were done such as removal of excess materials resulting from the trench excavations in the yard and from the concrete casting to the approved damping site, pumping out the septic tank of the temporary WC used by PWA staff at site and disposal of the sewer to approved site in addition to continuously housekeeping and dust control.





#### 3.9. Public Relations

CDM Smith continued the coordination and public relations activities during the reporting period. Coordination with both Al Zababdeh and Qabatiya Municipalities is always on the highest level to resolve any issue and / or obstacle that might be encountered during the construction activities. Both Municipalities always show full cooperation and commitment to ease all obstacles and other project related issues (if any).

## 3.10. Project Permitting & Security

The location of the project in the north of the West Bank with parts of the project located in area C requires continuous coordination with civil administration to facilitate the mobility of CDM Smith and subcontractors' personnel and vehicles to the project site if checkpoints exist or if any activity needs coordination.

CDM Smith Logistics and Security Manager has regular coordination meetings with the coordination office in Beit El. CDM Smith Logistics and Security Manager is always ready to coordinate with the required authority, or with the civil administration to facilitate any difficulty that may face the project construction.

#### 4. SCHEDULE

## 4.1. Progress vs. Planned

Updated CPM Schedule till end of February 2016 attached. Below is a summary of the project percentages of completion based on the latest updated schedule up to 29<sup>th</sup> February 2016. Final dates will be reflected in the final as-built schedule.

Performance % Complete = 99.38%

Schedule % Complete= 99.38%

Float = Zero Days

# 5. OUTLOOK FOR NEXT REPORTING PERIOD

The following subsections provide information on anticipated activities through the next reporting period.

#### 5.1. Planned Submission of Next Invoices

CDM Smith submitted Invoice #11 .This invoice covered the activities completed to the day of invoicing, payment No. 12 expected to be submitted first of March.

# 5.2. Planned Activities Anticipated During March 2016

The Following activities are anticipated to be submitted, constructed or implemented during March 2016:

Project handing over.

# 5.3. Planned Staff Changes

The CDM Smith teams will actively searching for additional staff to serve in any area required to complete the project with the best quality and safe procedure. Any required position will be filled as needed and as the overall workload increases. Various technical specialists will also work from other CDM Smith offices and/or work TDY in the West Bank as needed.



# 5.4. Planned Meetings and Correspondence with USAID

CO meeting #20 was scheduled to be on March 1<sup>ST</sup>.2016.

## 5.5. Planned Meetings and Correspondence with CMC

Coordination meetings are scheduled for each Task Order every two weeks. Task Order 00006 meetings are expected every two weeks in each reporting period

# 5.6. Planned Meetings and Correspondence with Others

CDM Smith stands ready to meet with other stakeholders as needed.

## 6. ISSUES AND CONSTRAINTS

CDM Smith works to actively communicate potential problems to the CMC and USAID. The following subsections cover current and anticipated issues and constraints.

#### 6.1. Administration

No administrative constraints were faced during the reporting period. The cooperation and the understanding of the project situation between the Contractor and the CMC allowed resolving all minor problems appeared during the reporting period.

## 6.2. Qabatiya Conveyance System

No issues at this time.

# 6.3 Qabatiya Well Site

#### 6.4 Others

No issues





# 7 APPENDIX

- Photos
- Meeting Minutes
- Submittals summary table
- Geo MIS logs
- Inspection Request Log
- Invoices log
- Variation Order Log
- Equipment List
- Environmental check list
- Updated February CPM schedule

**END OF REPORT** 



# Task Order 00006 - Qabatiya Well, Pump Station and Conveyance

Appendix

Task Order 00006 Photos

# USAID WEST BANK/GAZA



HCL technician collecting compacted basecoarse sample under concrete sidewalks , 01 February 2016



Installation of tie rods for the sleeve couplings , 01 February 2016



Installation of steel reinforcement for concrete sidewalks ,  $02\ \text{February}\ 2016$ 



Installation of concrete curbstone at buildings' entrances ,  $03 \; \text{February} \; 2016$ 



Programming of PLC prior to pre-commissioning stage, 04 February 2016



Connecting power cables to booster pump's electrical motor , 04 February 2016



# USAID | WEST BANK/GAZA



Welding of pipes and fittings for water line going to Living Quarter and Chlorination Building, 06 February 2016



First start-up of the submersible well pump, 07 February 2016



Programming of PLC before pre-commissioning stage , 08 February 2016



Calibration of the adjustable pressure switch installed at booster's discharge line , 09 February 2016



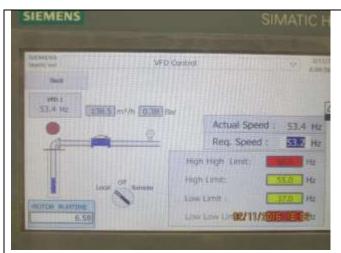
Training of WBWD trainees on the operation of chlorination system, 10 February 2016



Applying epoxy paint for external walls of balance tank  $\,$  , 10 February 2016



# USAID WEST BANK/GAZA



HMI display of data related to well pump's performance during pre-commissioning, 11 February 2016



Pressure transmitter during pre-commissioning stage , 12 February 2016  $\,$ 



HMI display of data related to booster pump's performance during pre-commissioning , 13 February 2016



Installation of galvanized steel shed for boosters area  $\,$  , 15 February 2016



Installation of antenna transmitter for connecting Qabatiya Station to the SCADA system, 16 February 2016



Voltage readings of power meter installed at boosters' panel in the MCC, 17 February 2016



# USAID | WEST BANK/GAZA



Volume of pumped water since first start-up of the well pump , 18 February 2016



HMI display of data related to well pump's operation during the commissioning period, 19 February 2016



Reading of pressure gauge installed at booster pump's discharge line , 20 February 2016



Asphalting works for Al-Zababdeh Main Street ,20 February 2016



Radiographic (X-ray) testing of steel welded joints at Qabatiya Pump Station , 21 February 2016



Well pump's VFD data display during the commissioning period , 22 February 2016



# USAID WEST BANK/GAZA



Boosters' data-log displayed by the HMI screen at the PLC panel , 23 February 2016



Field training session for WBWD trainees on the topic of operating control systems , 25 February 2016



Connecting Qabatiya Pump Station to the main power transmission line of Qabatiya Municipality, 28 February 2016



Safety toolbox meeting held at Qabatiya Pump Station, , 28 February 2016  $\,$ 



Asphalting works for the yard of Qabatiya Pump Station, 29 February 2016



Applying USAID logo tags at all equipment of Qabatiya Pump Station, 29 February 2016



# Task Order 00006 - Qabatiya Well, Pump Station and Conveyance

**Appendix** 

**Meeting Minutes** 





West Bank/Gaza INP II

# Meeting Minutes Qabatiya Well Pump Station TO 13-00006 Bi-Weekly Progress Meeting #47

Date:

Thursday; February 11, 2016

Timing:

11:00 AM - 01:00 PM

Location:

Primary Field Office Al Zababida, Palestine

Attendees:

PWA/WBWD	USAID	Black and Veatch	<b>CDM Smith and Subcontractors</b>
		Mr. Mukhles Najajreh	Mr. Ghassan Butmeh
		Mr. Adam Awwad	Mr. Talal Mahasin
		Mr. Murad Daoud	Mr. Abed Baker
		Ms. Lubna Haj Hamad	Mr. Ali Nasser
		Mr. Tamer Assaf	

#### Notes Prepared by:

Mukhles Najajreh, Black & Veatch

#### **Purpose:**

Bi-weekly Progress Meeting for Qabatiya Well Pump Station and Conveyance System Project—TO 13-00006; aimed to review progress of work, discuss project issues and provide solutions where required.

We believe that these minutes accurately reflect what transpired at the meeting. Unless we are notified in writing to the contrary by 2 working days, the minutes will stand as written.

#### **Abbreviation List:**

AAUJ: Arab American University Jenin, ASAP: As Soon As Possible, BCI: Brain-Computer Interface; BV: Black and Veatch, CM: Coordination Meeting, CO: Contracting Officer, DCL: District Coordination Liaison, CDM: Camp Dresser & McKee, DJR: Daily Joint Report, ECL: Environmental Check List; INFO: Information, MCC: Motor Control Center; MOM: Minutes of Meeting, MTS: Manual Transfer Switch, NCR: Non Compliance Report, OSHA: Occupational Safety and Health Administration, PLC: Programmable Logic Controller, PM: Progress Meeting, PWA: Palestinian Water Authority, QBW: Qabatiya Well, SCADA: Supervisory Control and Data Acquisition; SG: Switch Gear, USAID: United States Agency for International Development, VFD: Variable Frequency Drive; VOR: Variation Order Request, VO: Variation Order, WBWD: West Bank Water Department.

West Bank/Gaza INP II Program Office Black & Veatch Special Projects Corp Louis Building Ras Al-Tahuna Street , Al Bireh, Palestine

Tel: +970 (2) 294 7800, Fax: +970 (0) 240 2288

Black & Veatch Special Projects Corp 6601 College Boulevard Overland Park, Kansas 66211 USA Fax: +1 913 458 6535

Tel: +1 913 458 2900



#### 1. Project Key Data:

•	Notice of Award	April 02, 2013

• Contract Signing April 02, 2013

• Notice to Proceed May 14, 2013

Project Duration 550 Days

Modified Project Duration 1021 Days

Project Planned Completion Date
 November 14, 2014

Modified Completion Date
 February 28, 2016

• Project Elapsed Time 1003 Days

Project Planned Overall % of Completion N/A

Project Actual Overall % of Completion N/A

• Total Float (Variance Duration) N/A

#### 2. Documents distributed at this meeting:

- Copy of Progress Meeting Agenda #47.
- Copy of Project Key Data.
- Two Weeks Look Ahead by CDM Smith.

#### 3. Documents Attached:

- Progress Meeting Agenda #47.
- Attendees List.
- Two Weeks Look Ahead by CDM Smith.

4. Next Meeting is scheduled at 11:00 AM on Thursday, February 25, 2016 at Al Zababida, Palestine.



### Items Discussed:

No.	Ref.	Description	Action By	Date
	PM #15	Safety and Environment. 1.1 Housekeeping.  BV reminded CDM Smith to maintain and follow up the housekeeping especially interior of the buildings and inside electrical trenches all times in order to avoid work accidents.  CDM Smith stated they will follow up this issue.	CDM Smith	All Times
	PM #46	1.2 Lockout/Tagout.  BV emphasized on the importance of proper lockout/tagout practices and procedures to safeguard workers - as per OSHA requirements - to avoid accidents.  CDM Smith stated they will follow up this issue.	CDM Smith	All Times
1	PM#25	1.3 Environmental Checklist Closeout.  BV reminded CDM Smith to close the pending ECL via an inspection request.  CDM Smith acknowledged and stated that the checklists will be closed on Sunday; February 14, 2016.	CDM Smith	Feb 14, 2016
	PM #07	1.4 Personal Protective Equipment (PPEs).  BV reminded CDM Smith that no one is allowed to enter the construction site without wearing PPE's in accordance to project safety requirement.	CDM Smith	All Times
		CDM Smith stated they will follow up this issue.		
2	PM #36	Quality.  2.1 Closeout of Pending Site Memos.  BV urged CDM Smith to exert extra efforts to close all pending site memos. BV further advised that payment recommendation to certain items may be conditional to closing these site memos.	CDM Smith	ASAP
2	PM #43	2.2 Lab Recommendations for Test Reports.  BV advised that all third party testing reports submitted to Engineer shall include the laboratory recommendation based on the results, otherwise the submitted test's results will be unacceptable.	CDM Smith	All Times
3.	PM #01	Progress of Work. 3.1 Progress Summary by CDM Smith. CDM Smith presented a brief progress of work and distributed a progress percentages (refer to attached copy) comparing the actual completion percentage and planned percentages for the project. Furthermore, CDM Smith stated that the reported delays (3 days) are recoverable.	Info	



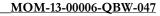


West Bank/Gaza INP II 3.2 Two Weeks Look Ahead. PM #01 CDM Smith distributed the Two Weeks Look Ahead schedule during the meeting (refer to attached copy), and presented their work plan for the Info upcoming period. CDM Smith advised that installation of major equipment had been completed, while the ongoing / remaining activities are the followings: **CDM** Feb 14, 2016 Metal works, checkered plate, steel shed, ladders and grating. Smith Feb 22, 2016 Feb 18, 2016 Furnish asphalt layer for Qabatiya station's entrance and yard. Feb 17, 2016 Milling and overlay along Az-Zababida main road. Applying Dekguard FC coating for the external surface of the balancing tank. Feb 24, 2016 Finalizing internal & external painting for all buildings. Feb 24, 2016 Furnish and install furniture for the living quarter building. Feb 21, 2016 Landscaping area. Feb 20, 2016 Installation of the main entrance gate. Feb 25, 2016 Rehabilitation of PWA/WBWD existing room as per VO#08. Feb 16, 2016 Mechanical works for Qabatiya well station. Electrical works for Qabatiya well station. Feb 16, 2016 Connecting Qabatiya well station to SCADA system. CDM Smith advised that the planned date for BCI to start installation of **CDM** Feb 14, 2016 well monitoring system is February 14, 2016, and further CDM Smith Smith advised that the planned completion date for connecting Qabatiya well Feb 28, 2016 station to SCADA system is February 28, 2016. PM #01 3.3 Pre-commissioning and Commissioning. CDM Smith advised that the pre-commissioning phase have been started Info Feb 09, 2016 on February 09, 2016 and they are progressing well in this regards. Furthermore, CDM Smith clarified that pumping to the networks and the **CDM ASAP** well performance test in presence of Baker Hughes representative will be Smith performed shortly. BV reminded CDM Smith to maintain the required startup records during All Times **CDM** testing and startup, and submit original to Engineer as per contract Smith document. Submittals. 4.1 Preliminary & Final O&M. PM #37 CDM Smith advised that they are working on finalizing the O&M CDM **ASAP** submittals and will submit them at the earliest. Smith 4 BV advised that for all equipment the calibration results and settings, as well as training materials shall be included in the final O&M Manuals. Furthermore, BV reminded that final O&M shall be submitted prior to Info starting the commissioning phase, as per contract documents.

West Bank/Gaza INP II Program Office Black & Veatch Special Projects Corp Louis Building Ras Al-Tahuna Street , Al Birch, Palestine

Tel: +970 (2) 294 7800, Fax: +970 (0) 240 2288

Black & Veatch Special Projects Corp 6601 College Boulevard Overland Park, Kansas 66211 USA Fax: +1 913 458 6535





West Bank/Gaza INP II PM #34 4.2 Training Requirements. CDM Smith advised that they are working on finalizing the subject items and will be submitted accordingly. **CDM** ASAP Smith BV reminded CDM Smith to submit a comprehensive copy for all trainings containing evaluation forms filled by the trainees on the training material and instructors. PM #30 4.3 As-Built Drawings. BV enquired from CDM Smith about the planned submission date for the Info as-built drawings. **CDM** CDM Smith advised that they are progressing well in regards of Feb 25, 2016 Smith verification of record drawings, and further CDM Smith noted that the planned date for submission the first draft of as-built drawings is February 25, 2016. PM #31 4.4 Field Test Results. BV reminded CDM Smith that as per specification the field tests' results **CDM ASAP** shall be signed by Engineer on site, and accordingly submitted prior to Smith starting the commissioning phase. Furthermore, BV stated that mill certificates for proper installation for all equipment shall be submitted to Engineer. PM #42 4.5 Special Tools and Spare Parts. BV urged CDM Smith to accelerate the submission of the spare parts and special tools lists, and reminded CDM Smith that the project is **CDM** approaching the completion date and such activities are time consuming **ASAP** Smith and may add further delays. BV further reminded CDM Smith to provide manufacturer's letter along with submittal for items that may addressed as "not applicable". Info Moreover, BV reminded CDM Smith that the special tools and spare parts lists that listed in section 17100 shall be coordinated with PWA/WBWD. **CDM ASAP** Smith CDM Smith advised that the lists will be submitted shortly. PM #26 Financial. BV inquired from CDM Smith about the submission date of next Info payment. 5 CDM Smith stated that the payment is under preparation and will be **CDM ASAP** submitted shortly. Smith Reports. PM #01 6.1 Monthly Report. Info No issues were reported during the meeting. 6 PM #01 6.2 Daily Joint Report. BV emphasized on the importance of starting the reported activities in the **CDM** All Times DJR with start/continue/finish; as these activities represent project Smith milestone.

#### **End of Minutes**

West Bank/Gaza INP II Program Office Black & Veatch Special Projects Corp Louis Building Ras Al-Tahuna Street , Al Bireh, Palestine

Tel: +970 (2) 294 7800, Fax: +970 (0) 240 2288

Black & Veatch Special Projects Corp 6601 College Boulevard Overland Park, Kansas 66211 USA Fax: +1 913 458 6535

Tel: +1 913 458 2900



West Bank/Gaza INP II

# USAID WEST BANK/GAZA INFRASTRUCTURE NEEDS PROGRAM INPII TO 13-00006, QABATIYA WELL PROJECT (QBW) BI-WEEKLY PROGRESS MEETING AGENDA #47

_	_				
	1	0	+	_	٠

Thursday; February 11, 2016

#### Timing:

11:00 AM -12:00 PM

#### Location:

Primary Field Office Al Zababida, Palestine

#### Attendees:

- PWA/WBWD.
- USAID.
- Black & Veatch.
- CDM Smith and Sub-Contractors.

#### Agenda:

#### 1. Safety & Environment.

- 1.1 Housekeeping.
- 1.2 Lockout / Tagout.

#### 2. Quality.

2.1 Closeout Pending Site Memos.

#### 3. Progress of Work.

- 3.1 Progress Summary by CDM Smith.
- 3.2 Two Weeks Look Ahead.
- 3.3 Pre-commissioning & Commissioning.

#### 4. Submittals.

4.1 Preliminary & Final O&M.

West Bank/Gaza INP II Program Office Black & Veatch Special Projects Corp Al Amal Building, Al Balou'a Area Mecca Street, Al Birch, West Bank Tel: +970 (2) 294 7800 Fax: +970 (2) 242 2088 Black & Veatch Special Projects Corp 6601 College Boulevard Overland Park Kansas 66211 USA Tel: +1 913 458 2900 Fax: +1 913 458 6535



West Bank/Gaza INP II

- 4.2 Training Requirements.
- 4.3 As-Built Drawings.
- 4.4 Field Test Results.
- 5. Financial.
- 6. Reports.
  - 6.1. Daily Joint Reports.
  - 6.2. Monthly Reports.
- 7. Others.





Subject: TO13-00006 QBW: Progress Meeting #47

Venue: B&V Office - Az-Zababdeh

Date: February 11, 2016

Time: From 11:00 AM to 12:00 PM

#### Attendees List

No.	Name	Title	Organization	Mobile Number	E-mail	Signature
1	Abdel Rahman Bakeer	safety Eng.	CDM, Smith	0592-997+00	bakeerar@cdm.smith.cop	4
2	TAIGH MAHASIN		com smith	0592-997702	mahasint Qcom smith.com	DIO
3	Ghessen Mahdi	PM	CDMSmith	0592997720	butnels@clasmite. on	1000
4	Lubra Haj Hamad	Sr. OE		0598 934661	Hajhamadl BBv. com	Lubra
5	Hajapata Hara			•	9	
6	Mukhles Vajajreh	PM	B&V	0598 934660	Najajreh HOBV. om	Mi.
7	Mittered Daguel	Quac	BV	059 81444618	1 01	
8	Adam Aura	RE	BU	xa2aa11.a	Annada by-con	- R
9	Tamer Assal	SC	ZV	0592007767	ASGF+C bycom	-100
10	Ali Naser	GM	ABC	6599246641	ali@a-brothers.com	1 ton 15
11						
12						
13						
14						
15						
16						
17						

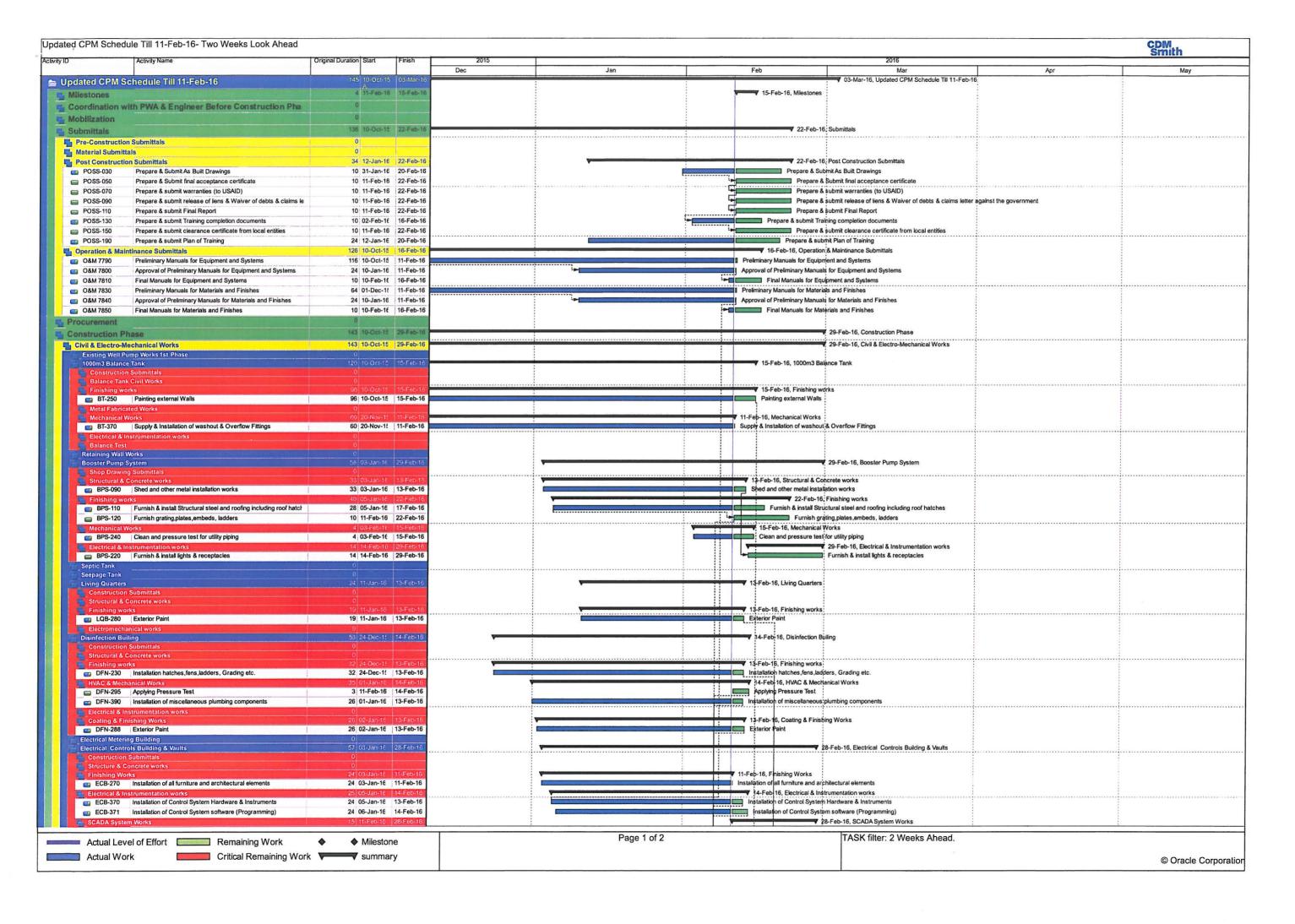


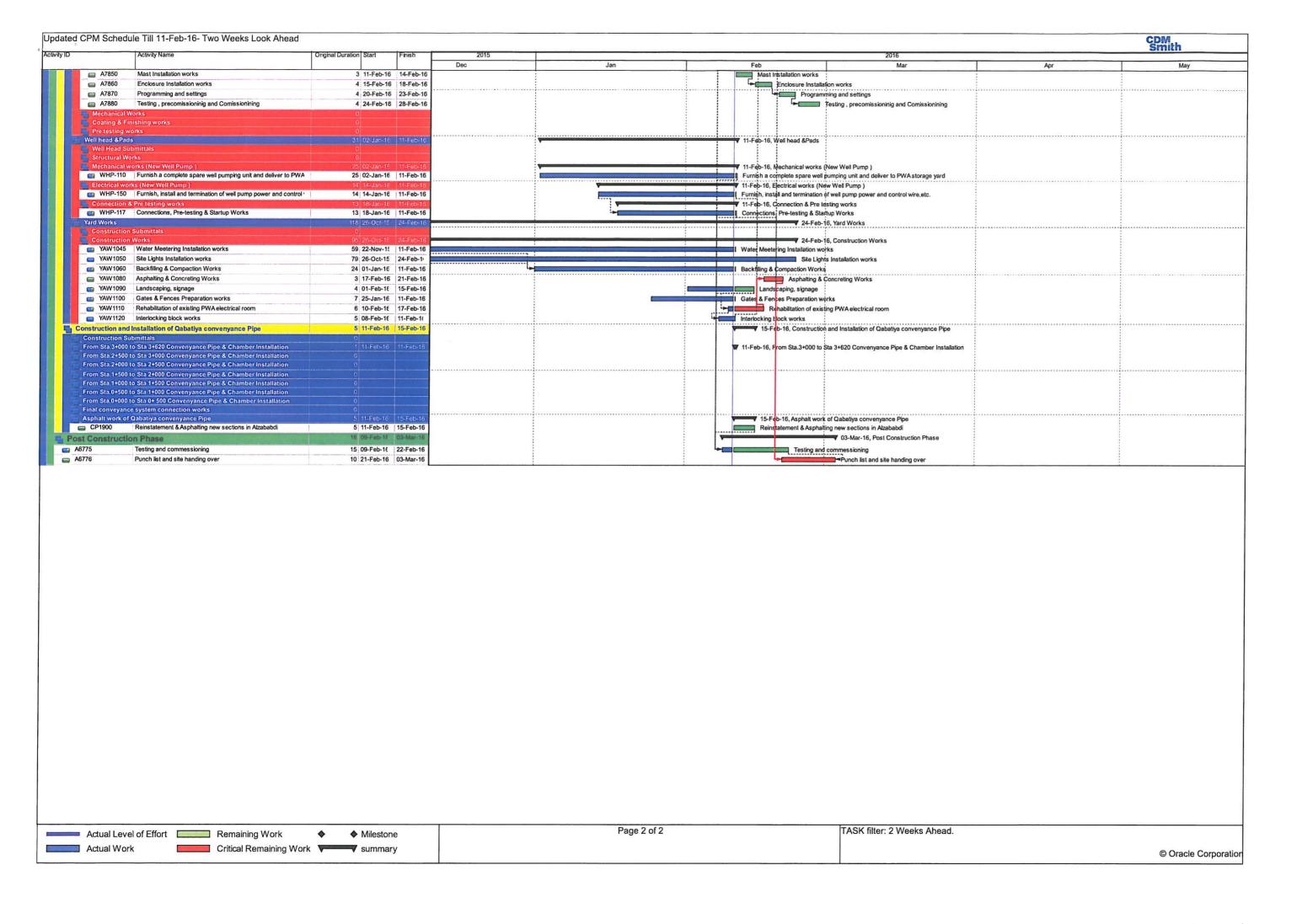
Date: 11th February, 2016

Updated CPM Schedule Till: 11th February, 2016

# **Qabatiya Well Pump Station and Conveyance System:**

- Planned Start Date = 14<sup>th</sup> May 2013
   Planned Finish Date = 28<sup>th</sup> February 2016
- Planned % complete = 97.94%
- Performance % complete = 95.17%
- Float (days) = 3





# Task Order 00006 - Qabatiya Well, Pump Station and Conveyance

**Appendix** 

**Submittals Summary Log** 

Submittal #	Submittal Name	Date Submitted To Client	Date Returned From Engineer	Status
SUB-13-00006-QBW-098B	Panel Boards / product data and shop drawings	16/02/2016	22/02/2016	Е
SUB-13-00006-QBW-256B	Angle Support & wedge anchor for grating support	16/02/2016	21/02/2016	Е
SUB-13-00006-QBW-394B	Shop drawing for SS 316 grating for 1000m³ balance tank pits	16/02/2016	21/02/2016	Е
SUB-13-00006-QBW-470B	As Built drawings for qabatiya Convryance system	14/02/2016		
SUB-13-00006-QBW-568C	local maintenance facility qualification- for Qabatiya Booster Pumps	17/02/2016		
SUB-13-00006-QBW-711B	Mechanical shop drawing for washout drain pipes to wadi adjacent to QBW pump station	11/02/2016	25/02/2016	В
SUB-13-00006-QBW-731B	Training outline for the submersible deep well pump and Trainer's CV	17/02/2016		
SUB-13-00006-QBW-815B	Preliminary O&M Manual for Medium voltage switchgear	07/02/2016	10/02/2016	Α
SUB-13-00006-QBW-873B	Training Materials(PLC,HMI and Operators field training)	14/02/2016	29/02/2016	В
SUB-13-00006-QBW-876B	Preliminary operation & maintenance manual of chlorination system components	25/02/2016	29/02/2016	В
SUB-13-00006-QBW-886B	Factory Test Report for the Surge Tank	04/02/2016	07/02/2016	Α
SUB-13-00006-QBW-913A	Shop drawing for fence details around transformer	01/02/2016	Retracted 2/2/2	2016
SUB-13-00006-QBW-913A	Test certificate of portable air compressor	02/02/2016	07/02/2016	Α
SUB-13-00006-QBW-914A	Degree of compaction test (field density -sampling date Feb1st,2016)Ref.No:M/1602/3	02/02/2016	07/02/2016	Α
SUB-13-00006-QBW-915A	Degree of compaction test (field density ) for the bascoarse layer blow concrete sidewalks-report Ref.No:M/1602/22	02/02/2016	07/02/2016	Α
SUB-13-00006-QBW-916A	Up date risk management plan for January 2016	04/02/2016	07/02/2016	Α
SUB-13-00006-QBW-917A	Monthly updates for environmental monitoring and mitigation plan for January 2016	04/02/2016	07/02/2016	Α
SUB-13-00006-QBW-918A	Updated CPM Schedule until 31 January 2016	04/02/2016	15/02/2016	В
SUB-13-00006-QBW-919A	Monthly QA/QC and Safety Plans Updates for January 2016	07/02/2016	07/02/2016	Α
SUB-13-00006-QBW-920A	Degree of compaction test (field density ) for the bascoarse layer blow interlocking sidewalks Tiles -report Ref.No:M/1602/100	07/02/2016	07/02/2016	А
SUB-13-00006-QBW-921A	Test Report on Concrete Compressive Strength for Fence wall footing transformer pads(1&2)& well metering pad7 &28 Day Result) Ref: BM/38203	07/02/2016	10/02/2016	Α
SUB-13-00006-QBW-922A	Test Report on Concrete Compressive Strength for top parts of transformer pads(1&2)7 &28 Day Result ) Ref: BM/38227	07/02/2016	10/02/2016	А
SUB-13-00006-QBW-923A	Test Report on Concrete Compressive Strength for SOGof booster station & western part of fence wall-7 &28 Day Result ) Ref: BM/38322	07/02/2016	10/02/2016	Α
SUB-13-00006-QBW-924A	Test Report on Concrete Compressive Strength for BT inlet metering pad-7 &28 Day Result ) Ref. BM/38357	07/02/2016	10/02/2016	Α
SUB-13-00006-QBW-925A	Test Report on Concrete Compressive Strength for wellhead pad-7 &28 Day Result ) Ref: BM/38356	07/02/2016	10/02/2016	Α
SUB-13-00006-QBW-926A	Sample of interlocking block tiles	07/02/2016	Р	

Submittal #	Submittal Name	Date Submitted To Client	Date Returned From Engineer	Status
SUB-13-00006-QBW-927A	Updated Submittal Registry (up to Jan 31 2016)	08/02/2016	10/02/2016	А
SUB-13-00006-QBW-928A	Test report of flexural strength & dimension of concrete curbeastone Ref: M/1602/50	10/02/2016	11/02/2016	А
SUB-13-00006-QBW-929A	Final Operation & Maintenance Manual for Section 32: Step-up Transformer (Draft)	10/02/2016	29/02/2016	А
SUB-13-00006-QBW-930A	Motor insulation test	11/02/2016	11/02/2016	Α
SUB-13-00006-QBW-931A	Cable insulation test	11/02/2016	11/02/2016	А
SUB-13-00006-QBW-932A	Chemical and microbiological analytical report for 1000 m3 Qabatiya water balance tank	11/02/2016	29/02/2016	Α
SUB-13-00006-QBW-933A	Final Operation & Maintenance Manual for Section 17: Booster Pumps & Electric Motors	11/02/2016	29/02/2016	А
SUB-13-00006-QBW-934A	Final Operation & Maintenance Manual for Section 30: Medium Voltage Switchgear	11/02/2016	29/02/2016	Α
SUB-13-00006-QBW-935A	Certification of proper installation for the surge bladder tank	14/02/2016	21/02/2016	Α
SUB-13-00006-QBW-936A	Coordination Study for Equipment and Instruments of Qabatiya Well Pump Station	14/02/2016	22/02/2016	Α
SUB-13-00006-QBW-937A	Final operation & maintenance manual for section 18:Submersible well pump	14/02/2016	29/02/2016	Α
SUB-13-00006-QBW-938A	Test Report on Concrete Compressive Strength for slab on grade around balancing tank & electrical metering building7 Day Result ) Ref: M/1602/124	14/02/2016	15/02/2016	Α
SUB-13-00006-QBW-939A	Final operation & maintenance manual for section 28: Varible frequency drive of well pump	14/02/2016	29/02/2016	А
SUB-13-00006-QBW-940A	Final operation & maintenance manual for section 29: Varible frequency drive of Booster pump	15/02/2016	29/02/2016	Α
SUB-13-00006-QBW-941A	Final operation & maintenance manual for section 33: Step-down transformer	15/02/2016	29/02/2016	А
SUB-13-00006-QBW-942A	Revised CPM Schedule up to 2 Feb 2016	16/02/2016	25/02/2016	В
SUB-13-00006-QBW-943A	Preliminary Operation & Maintenance Manuals (Sections 6, 8, 10 & 45)	16/02/2016	29/02/2016	В
SUB-13-00006-QBW-944A	Results of field testing & inspections for instruments of Qabatiya pump station	17/02/2016	22/02/2016	Α
SUB-13-00006-QBW-945A	Test Report on cement block for paving (interlock block), Ref.: M/1602/134 & M/1602/134a	18/02/2016	22/02/2016	Α
SUB-13-00006-QBW-946A	Method statement of concrete side walk	18/02/2016	25/02/2016	В
SUB-13-00006-QBW-947A	As Built drawing for 1000m³ water balance tank	18/02/2016	Retracted 2/3/2	2016
SUB-13-00006-QBW-948A	Smoke detector- Alternative	21/02/2016	25/02/2016	А
SUB-13-00006-QBW-949A	As Built drawing for living Quarter building (Civil, Electrical & Mechanical)	21/02/2016	Retracted 2/3/2	2016
SUB-13-00006-QBW-950A	Preliminary Operation & Maintenance Manual for Section 34 : MCC	24/02/2016	29/02/2016	В
SUB-13-00006-QBW-951A	Test Report on Concrete Compressive Strength for rig and blow-off pads28 Day Result ) Ref:M/1601/344a	22/02/2016	22/02/2016	Α
SUB-13-00006-QBW-952A	Test Report on Concrete Compressive Strength for Booster station walls& transformer (TR-01)pad7 &35 Day Result ) Ref: BM/CT/16020-A	23/02/2016	25/02/2016	Α

#### USAID/West Bank-Gaza-AID-296-TO-13-00006 Qabatiya Well Pump Station Conveyance Pipeline Submittal Log

Submittal #	Submittal Name	Date Submitted To Client	Date Returned From Engineer	Status
SUB-13-00006-QBW-953A	Preliminary Operation & Maintenance Manual for Section 31 : PLC	24/02/2016		
SUB-13-00006-QBW-954A	Final operation & maintenance manual -Section 1,7,19,24 &39 GateValve,Ball valve, Bladder Surge Tank,Adjustable Pressure Switch & Fire Alarm System	24/02/2016	29/02/2016	А
SUB-13-00006-QBW-955A	Pre-commissioning test forms observations for Booster pump at Qabatiya well pump station	28/02/2016		
SUB-13-00006-QBW-956A	Commissioning Observations for Booster pump at Qabatiya well pump station	28/02/2016		
SUB-13-00006-QBW-957A	Preformance test for Qabatiya well Submersible pump	28/02/2016		
SUB-13-00006-QBW-958A	Preformance test for Qabatiya Booster pumps (P-310& P-320)	28/02/2016		
SUB-13-00006-QBW-959A	instrumentation & power cables (Alternatives)	29/02/2016		
SUB-13-00006-QBW-960A	Results of field testing & inspections for (cable insulation and earthing ) at Qabatiya pump station	29/02/2016		
SUB-13-00006-QBW-961A	Tack coat test (RC)-Report Ref. No: M/1602/422	29/02/2016	02/03/2016	А

**Appendix** 

**Invoices Log** 

## USAID WESR BANK/GAZA INFRASTRUCTURE NEEDS Program INVOICES LOG SHEET

TASK ORDER NO. : AID-294-TO-13-00006

#### **Qabatiya Well Pump Station and Conveyance System**

Invoice #	Inv	oiced amount	Cumulative amount	I	BOQ amount	_	ontract Value (include DW)	Rer	maining Amount	Date Received by B&V	Invoice Status	COR
1	\$	261,286.00	\$ 261,286.00	\$	6,858,760.00	\$	7,408,760.00	\$	6,597,474.00	7/18/2013	Paid	Anan Masri
2	\$	64,720.88	\$ 326,006.88	\$	6,858,760.00	\$	7,408,760.00	\$	7,082,753.12	12/1/2013	Paid	Anan Masri
3	\$	514,208.49	\$ 840,215.37	\$	6,858,760.00	\$	7,408,760.00	\$	6,568,544.63	1/19/2014	Paid	Anan Masri
4	\$	248,893.01	\$ 1,089,108.38	\$	6,858,760.00	\$	7,408,760.00	\$	6,319,651.62	3/6/2014	Paid	Anan Masri
5	\$	139,266.38	\$ 1,228,374.76	\$	6,858,760.00	\$	7,408,760.00	\$	6,180,385.24	6/1/2014	Paid	Anan Masri
6	\$	121,525.77	\$ 1,349,900.53	\$	6,858,760.00	\$	7,408,760.00	\$	6,058,859.47	8/20/2014	Paid	Anan Masri
7	\$	118,835.85	\$ 1,468,736.38	\$	6,858,760.00	\$	7,408,760.00	\$	5,940,023.62	10/29/2014	Paid	Anan Masri
8	\$	246,975.61	\$ 1,715,711.99	Ψ,	10,709,995.00	\$	10,709,995.00	\$	8,994,283.01	3/29/2015	Paid	Anan Masri
9	\$	136,404.36	\$ 1,852,116.35	Ç	10,659,519.27	\$	10,709,995.00	\$	8,807,402.92	10/21/2015	Paid	Anan Masri
10	\$	93,059.97	\$ 1,945,176.32	Ç	10,659,519.27	\$	10,709,995.00	\$	8,714,342.95	12/20/2015	Paid	Anan Masri
11	\$	4,454,629.57	\$ 6,399,805.89	Ç	10,646,204.92	\$	10,709,995.00	\$	4,246,399.03	2/23/2016	Paid	Anan Masri

**Appendix** 

Variation Order Log

VO NO.	Description	Variation Order Amount	USAID Signing Date
VO-00006-QBW-001	Time Extension	\$0.00	20-Sep-13
VO-00006-QBW-002	Roackfill layer Under the Balancing tank	\$73,926.51	30-Oct-13
VO-00006-QBW-003	Construction of Retaining Wall around the Balancing Tank	\$234,479.52	3-Dec-13
VO-00006-QBW-004	Substitution of Pipe Zone Backfill material (Bedding Materials), Mechanical Changes in the Conveyance Pipeline Connection Chambers, Change the staging Area, Change in the Mobilization and New Definitive Project Quantities	-\$121,176.62	10-Oct-14
VO-00006-QBW-005	Modification No.1-Redesign of Qabatiya Pump Station	\$3,664,005.59	24-Dec-14
VO-00006-QBW-006	Mechanical Changes in Chambers and final Definitive Quantities for Qabatiya Conveyance System	(\$4,490.98)	24-Apr-15
VO-00006-QBW-007	PARTIAL ACCEPTANCE FOR QABATIYA CONVEYANCE SYSTEM AND CHANGES IN REQUIREMENTS	(\$45,984.75)	9-Oct-15
VO-00006-QBW-008	NEW ITEM, CHANGES IN REQUIREMENTS, PRE-DEFINITIVE QUANTITIES AND TIME EXTENSION	\$16,407.97	2-Feb-16
VO-00006-QBW-009	CHANGES IN REQUIREMENTS, PRE-FINAL DEFINITIVE QUANTITIES AND TIME EXTENSION	(\$29,722.32)	23-Feb-16

**Appendix** 

Geo MIS logs

#### USAID WEST BANK/ GAZA

#### INFRASTRUCTURE NEEDS PROGRAM INPII

CONTRACT NO. :AID-294-I-00-12-00001

#### TASK ORDER NO.: AID-294-TO-13-00006

Qabatiya Well Pump Station and Conveyance System

#### Temproray Job Days Summary Report

Task Order Name: To-13-00006

PERIOD FROM: 5/14/2013

PERIOD TO: 2/29/2016

Sub-project or Activity Name: Qabatiya Well Pump Station and Conveyance System

CONTRACTOR: CDM Smith

Date			Site	e Staff Job Day	/s**		Total Job	No of Full Time	
Month	Year	Management	Engineers	Skilled Labor	Unskilled Labor	Other	Days	Equivalent (FTE) Jobs in the Month*	Notes of Comments
May	2013	86.88	44.13	0.00	0.00	2.50	133.50	6	
June	2013	125.25	50.88	3.63	0.00	0.00	179.75	8	
July	2013	114.75	44.00	79.25	46.00	16.63	300.63	13	
August	2013	93.38	72.63	0.00	22.00	0.00	188.00	8	
September	2013	127.13	179.00	72.38	32.13	3.75	414.38	17	
Total of FY 2013							1216.25	51	
October	2013	124.63	179.13	88.63	39.13	8.13	439.63	18	
November	2013	101.25	172.63	49.13	36.50	0.00	359.50	15	
December	2013	109.00	164.38	139.25	67.13	0.00	479.75	20	
January	2014	105.13	174.25	205.00	166.88	7.88	659.13	28	
February	2014	102.63	190.00	193.00	211.63	42.13	739.38	31	
March	2014	114.00	207.25	129.50	122.38	21.13	594.25	25	
April	2014	115.50	233.13	78.38	79.13	0.00	506.13	21	
May	2014	105.63	173.38	213.88	112.88	0.00	605.75	25	
June	2014	107.00	150.38	151.13	117.50	6.00	532.00	22	
July	2014	81.50	65.00	16.75	114.88	0.50	278.63	12	
August	2014	112.25	101.50	131.25	216.63	4.13	565.75	24	
September	2014	107.13	78.63	207.88	93.75	4.13	491.50	21	
Total of FY 2014							6251.38	263	
October	2014	84.38	60.50	186.13	185.13	0.00	516.13	21.69	
November	2014	109.63	59.25	195.13	183.50	9.38	556.88	23.40	
December	2014	127.63	52.88	195.38	122.50	3.38	501.75	21.08	
January	2015	94.88	95.13	145.50	67.25	4.13	406.88	17.10	
February	2015	88.38	117.25	40.75	43.50	0.00	289.88	12.18	
March	2015	89.50	159.50	31.38	87.63	9.50	377.50	15.86	
April	2015	92.50	152.00	36.13	70.63	13.75	365.00	15.34	
May	2015	95.50	146.63	62.88	76.25	11.00	392.25	16.48	
June	2015	93.13	146.75	79.00	61.63	21.88	402.38	16.91	
July	2015	81.13	95.88	120.50	79.88	20.38	397.75	16.71	
August	2015	101.88	161.75	136.88	116.75	28.75	546.00	22.94	
September	2015	86.88	135.63	141.88	98.88	22.00	485.25	20.39	
Total of FY 2015							5237.63	220.07	
October	2015	99.50	154.63	181.50	168.75	28.00	632.38	26.57	
November	2015	99.38	155.75	200.38	172.00	23.25	650.75	27.34	
December	2015	126.63	166.13	411.88	261.25	41.88	1007.75	42.34	
January	2016	94.38	166.38	381.50	248.88	38.00	929.13	39.04	
February	2016	83.20	183.13	357.13	161.00	26.00	810.45	34.05	
Total of FY 2016							4030.45	169.35	

<sup>\*</sup> No of Full Time Equivalent (FTE) Jobs in the Month = Total Job Days / Avg. Days in the Month(23.8)

I:\projects\Monthly Geo-MIS Man-days -02-2016.xlsx

<sup>\*\*</sup> This data collection sheet is for Palestinian staff only, experts and foreign employee shall not be included.

#### USAID WEST BANK/ GAZA

#### INFRASTRUCTURE NEEDS PROGRAM INPII

#### CONTRACT NO. :AID-294-I-00-12-00001

#### TASK ORDER NO.: AID-294-TO-13-00006

Qabatiya Well Pump Station and Conveyance System

Temproray Job Days Report

Task Order Name: TO-13-00006

Sub-project or Activity Name: Qabatiya Well Pump Station and Conveyance System

CONTRACTOR:CDM Smith

SUBCONTRACTOR(s): Arab Brothers

SUBCONTRACTOR :Site Group CO. LTD

															Job Days	**											
												lassificati	on (Hour	s)										N	/Ian-days*		
			Mana	gement						Engineer	s					Skilled labor			Unskilled la	abor	Oth	er					
DATE	Name of Contractor /Subcontractor	Task Order Manager	Quality Control Manager	Safety & Envi. Manager	Project Manager #1, #2, etc	Electrical Engineer	Project Engineer	Office Engineer	Quality Control Engineer	Contract Specialist	Civil Engineer	Site Engineer	Survy Engineer	Mechanical Engineer	Foreman	Skilled Labor*	Equipment Operator	Flagman	Office Boy	Unskilled Labor	Driver		Total Management	Total Engineers	Total Skilled	Total Unskilled	Total Other
	CDM Smith	8	8	8			9							8					8								
February 1, 2016	Arab Brothers					9		8				8	9			88	18			48	8		3	6	13.25	7	1
	Site Group																										
	CDM Smith	8	8	8			8							8					8								
February 2, 2016	Arab Brothers					8		8				8	8			88	16			48	8		3	6	13	7	1
	Site Group																										
	CDM Smith	8	8	8			8							8					8								
February 3, 2016	Arab Brothers					8		8				8	8			88	16			48	8		3	6	13	7	1
	Site Group																						1				
	CDM Smith	8	8	8		8	8							8					8								1
February 4, 2016	Arab Brothers					8		8				8	8			120	8			48	8		3	7	16	7	1
	Site Group																						1				
	CDM Smith																										1
February 5, 2016	Arab Brothers																						0	0	0	0	0
	Site Group																						1				
	CDM Smith	8	8	8		8	8	i e	1					8		8			8			İ	i				<b>†</b>
February 6, 2016	Arab Brothers					8		8	1			8	8			88	8			48	8		3	7	13	7	1
* *	Site Group							1	1														1				
	CDM Smith	8	8	8		8	8	<b>†</b>	1					8		8			8								<b>†</b>
February 7, 2016	Arab Brothers					8		8	1			8	8			120				48	8		3	7	16	7	1
	Site Group																						1				
	CDM Smith	10	8	10		8	8	Ì						8					8								
February 8, 2016	Arab Brothers					10		8				10	8			160	8			48	8		3.5	8	21	7	1
	Site Group																			Ì			1				1

															Job Days	**											
												lassificatio	on (Hours	s)										N	/Ian-days*		
			Manag	ement	1					Engineer	s	1				Skilled labor	r		Unskilled la	abor	Otl	ner					
DATE	Name of Contractor /Subcontractor	Task Order Manager	Quality Control Manager	Safety & Envi. Manager	Project Manager #1, #2, etc	Electrical Engineer	Project Engineer	Office Engineer	Quality Control Engineer	Contract Specialist	Civil Engineer	Site Engineer	Survy Engineer	Mechanical Engineer	Foreman	Skilled Labor*	Equipment Operator	Flagman	Office Boy	Unskilled Labor	Driver		Total Management	Total Engineers	Total Skilled	Total Unskilled	Total Other
	CDM Smith	10		8		8	9							10					8								
February 9, 2016	Arab Brothers					10		8				10	8			160	4			48	8		2.25	8	20.5	7	1
	Site Group																										
	CDM Smith	8	8	8		8	8							8					8					_		_	
February 10, 2016	Arab Brothers					8		8				8	8			128	3			48	8		3	7	16.375	7	1
	Site Group																										
	CDM Smith	8	12	8		8	8							12					8							_	1
February 11, 2016	Arab Brothers					8		8				8	8			128				48	8		3.5	8	16	7	1
	Site Group																										
T	CDM Smith		8											8													
February 12, 2016	Arab Brothers															16							1	1	2	0	0
	Site Group																										<u> </u>
	CDM Smith	12	11			8	8							12					8							_	1
February 13, 2016	Arab Brothers					11		8				10	8			120	8			48	8		2.875	8	16	7	1
	Site Group																										
F 1 44 2046	CDM Smith	12	12	8		8	8					4.0		12		400			8	10			,		4.5	-	1
February 14, 2016	Arab Brothers					10		8				10	8			120				48	8		4	8	15	7	1
	Site Group	- 10												- 10													
F 1 47 2046	CDM Smith	12	12	8		8	8					4.0		12		400			8				4		4.5	-	
February 15, 2016	Arab Brothers					10		8				10	8			120				48	8		4	8	15	7	1
	Site Group			4.0																							
E-1 16 2016	CDM Smith	12	12	10		8	8					4.0		12		440			8	40			4.25	0	22	7	,
February 16, 2016	Arab Brothers					10		8				10	8			160	16			48	8		4.23	8	22	/	1
	Site Group	40	4.4	0			40							10							1						4
E-1 17, 2016	CDM Smith	12	11	9		8	12	0					0	12		00			8	40	0		4	0	11	7	1
February 17, 2016	Arab Brothers Site Group					8		8				8	8			80	8			48	8		4	8	11	/	1
	CDM Smith	8	9	0		0	1							12				1	0								+
February 18, 2016	Arab Brothers	٥	,	y		8	1	8				9	8	12		80	16	1	8	48	8	<b>-</b>	3.25	7	12	7	1
1 Columny 10, 2010	Site Group					0		0					0			00	10	-		40	•		3.43	′	12	′	1
	CDM Smith		12																								+
February 19, 2016	Arab Brothers		12									8				40	24	1		40	8		1.5	1	8	5	1
1. Columny 19, 2010	Site Group											8	-			40	24	1		40	8	-	1	1	O	,	1
	CDM Smith	12		12		8	9					1	-	10		-	1	1	8		1						+
February 20, 2016	Arab Brothers	14		12		8	2	8				8	8	10		120	56	1		40	8	-	3	7	22	6	1
1 Columny 20, 2010	Site Group		-	-	-								0		1	120	30	1		40	•	-	,	, '		0	,
-	CDM Smith	12	12	3		8	9					<del>                                     </del>	1	9	1	1	<del>                                     </del>	1	8	-	1	1	1				+-+
February 21, 2016	Arab Brothers	12	12	J		8	,	8				8	8	,		80	16	1	U	40	8		3.375	7	12	6	1
1 Columny 21, 2010	Site Group	<b>-</b>	-	-	-								0		1	00	10	1		40	•	-	5.515	_ ′	12	0	1
	CDM Smith	11	11	12		8	8					<del>                                     </del>	1	11	1	1	<del>                                     </del>	1	8	-	1	1	1				$\vdash$
February 22, 2016	Arab Brothers	11	11	12		8	0	8				8	8	11				1	U		8		4.25	7	0	1	1
1 001441 22, 2010	Site Group			-		0		0				0	0		1		1	1			0		1.23		,		1
	Site Group		l	L	l .				1			1	l		I	1	1	<u> </u>		l		l	l	L			

															Job Days	; **							•				
												assificatio	on (Hours	s)										N	/Ian-days*		
			Manag	ement						Engineer	3					Skilled labo			Unskilled l	abor	Otl	er					
DATE	Name of Contractor /Subcontractor	Task Order Manager	Quality Control Manager	Safety & Envi. Manager	Project Manager #1, #2, etc	Electrical Engineer	Project Engineer	Office Engineer	Quality Control Engineer	Contract Specialist	Civil Engineer	Site Engineer	Survy Engineer	Mechanical Engineer	Foreman	Skilled Labor*	Equipment Operator	Flagman	Office Boy	Unskilled Labor	Driver		Total Management	Total Engineers	Total Skilled	Total Unskilled	Total Other
	CDM Smith	12	12			8	9							12					8								
February 23, 2016	Arab Brothers					8		8				8	8								8		3	8	0	1	1
	Site Group																										ĺ
	CDM Smith	11				8	12							10					8								
February 24, 2016	Arab Brothers					8		8				8	8			40	8			40	8		1.375	8	6	6	1
	Site Group																										1
	CDM Smith	8	8	8		8								8					8								
February 25, 2016	Arab Brothers					8		8				8	8			80	16			40	8		3	6	12	6	1
	Site Group																										1
	CDM Smith																										
February 26, 2016	Arab Brothers																						0	0	0	0	0
	Site Group																										Ì
	CDM Smith	11	9	10		8	9							9					8								
February 27, 2016	Arab Brothers					8		8				8	8			80	16			40	8		3.75	7	12	6	1
	Site Group																										Ì
	CDM Smith	14	13	9		8	8							9					8								
February 28, 2016	Arab Brothers					8		8				8	8			120	16			40	8		4.5	7	17	6	1
	Site Group																				i		1				ĺ
	CDM Smith	12	10	9		8	9							10					8								
February 29, 2016	Arab Brothers					8		8				8	8			120	16			40	8		1.8235294	7	17	6	1
	Site Group																										ĺ
Total of Month		255.00	238.00	189.00	0.00	390.00	200.00	200.00	0.00	0.00	0.00	220.00	201.00	254.00	0.00	2560.00	297.00	0.00	200.00	1088.00	208.00	0.00	83.20	183.13	357.13	161.00	26.00

<sup>\*</sup> Total Man-days = Total Hours / 8

**Electrical Engineer**: (Telecomm Department Director, TS&CC Director, Solution Engineer, Senior Software Engineer)

Skilled Labor: Senior Project Technician

**Skilled Labor**: Certified welding Inspector, Welder's assistant.

Skilled Labor :Tool pusher,Driller,Dereck man

<sup>\*\*</sup> This data collection sheet is for Palestinian staff only, experts and foreign employee shall not be included.

**Appendix** 

Inspection Request Log

#### USAID Contract No.: AID-294-I-00-12-00001

#### TASK ORDER NO.: AID-294-TO-13-00006

#### Qabatiya Well Pump Station And Conveyance System

#### Inspection Request

IR No.	Description	submitted Date to CMC	Inspection Date	Degree
IR-1300006-QBW-261B	inspection of 1",2" and ½" U-PVC pipes, elbows and caps to be used for electrical works. Detailed material description is shown in the attached MRR 005	11/02/2016	14/02/2016	А
IR-1300006-QBW-294B	Inspection for the installation of coping stone for the parapet tops of the living quarter	11/02/2016	11/02/2016	А
IR-1300006-QBW-440B	Inspection of Delivered Ventilation Fans and Associated Equipment as Shown in the Attached MRR-036.	11/02/2016		
IR-1300006-QBW-449B	Inspection for the levels of modified subgrades beneath the footings of transformer (TR 1& TR2)as shown in the attached drawings	11/02/2016	11/02/2016	А
IR-1300006-QBW-526B	Inspection for Analyser Measuring System as per the attached delivery note MRR-059	11/02/2016	14/02/2016	Α
IR-1300006-QBW-568B	Inspection of surface preparation top par of retaining walls prior to start installation of fence	21/02/2016	22/02/2016	С
IR-1300006-QBW-570B	Inspection for delivered steel well discharge elbow for Qabatiya well as shown in the attached MRR-075	11/02/2016	11/02/2016	А
IR-1300006-QBW-571B	Inspection of surface preparation for floor of balance tank prior to applying first epoxy coat	11/02/2016	11/02/2016	Α
IR-1300006-QBW-573B	Inspection of compacted basecoarse layer around AAUJ, Azzababdeh and other chambers on the conveyance system prior to asphalting works	11/02/2016	11/02/2016	А
IR-1300006-QBW-575B	Inspection for delivered electrical panels with breakers as shown in the attached MRR-076	11/02/2016	14/02/2016	С
IR-1300006-QBW-582B	Inspection of installation AC units in the electrical control building	07/02/2016	08/02/2016	С
IR-1300006-QBW-582C	Inspection of installation AC units in the electrical control building	10/02/2016	10/02/2016	Α
IR-1300006-QBW-591A	Inspection for testing and pre-commissioning for BH surface equipment (harmonic filters 1&2,VFD's1&2 and step-up transformer)	29/02/2016	01/03/2016	А
IR-1300006-QBW-595B	Inspection of installation of wooden door and kitchen cabinet on the living quartet	04/02/2016	04/02/2016	Α
IR-1300006-QBW-600B	Inspection for the delivered batteries, battery charger, cabinets and electrical safety kit as shown in the attached MRR- 085	14/02/2016	14/02/2016	А
IR-1300006-QBW-601B	Inspection for piping and valves installation at booster station area.	07/02/2016	08/02/2016	Α
IR-1300006-QBW-602B	Inspection for piping and valves installation at well discharge and balance tank inlet, overflow and equalization.	07/02/2016	08/02/2016	А
IR-1300006-QBW-605A	Inspection for the installation of lighting poles, pole-02, pole-03 and pole-04 as shown in the attached drawing	11/02/2016	14/02/2016	А
IR-1300006-QBW-611A	Inspection for installation for the MCC as per the attached certification of proper installation	01/02/2016	01/02/2016	А
IR-1300006-QBW-612A	Inspection for installation for the padmount step down transformer	01/02/2016	01/02/2016	А
IR-1300006-QBW-613A	Inspection of applying and compacting base coarse layer under side walk prior casting concrete	01/02/2016	01/02/2016	С
IR-1300006-QBW-613B	Inspection of applying and compacting base coarse layer under side walk prior casting concrete	02/02/2016	03/02/2016	А
IR-1300006-QBW-614A	Inspection for installation control system hardware(PLC)as per the attached	02/02/2016	03/02/2016	А
IR-1300006-QBW-615A	Inspection for the delivered portable air compressor as shown in the attached MRR-086	02/02/2016	03/02/2016	А
IR-1300006-QBW-616A	Inspection for installation of BHI well pump and all associated surface equipment (harmonic filters 1&2 VFDs1&2,step up transformer)	02/02/2016	02/02/2016	А
IR-1300006-QBW-617A	Inspection of electrical and mechanical works in side walk prior casting concrete	04/02/2016	04/02/2016	А

IR-1300006-QBW-618A	Inspection of formwork and reinforcement of side walk prior casting concrete	04/02/2016	04/02/2016	А
IR-1300006-QBW-619A	Inspection for the installation of Siemens medium voltage switchgear as per the attached certificate of proper installation	04/02/2016	04/02/2016	Α
IR-1300006-QBW-620A	Inspection for water tightness test for the roof insulation of well site building (LQ,EM,EC and chlorination building)	07/02/2016	07/02/2016	Α
IR-1300006-QBW-621A	Inspection for the delivered pressure transmitters, ultrasonic transmitters, paddle flow switches and level transducer as shown in the attached MRR-87	07/02/2016	08/02/2016	А
IR-1300006-QBW-622A	Inspection of installation AC units in the living quarter building	07/02/2016	08/02/2016	Α
IR-1300006-QBW-623A	Inspection for the delivered interlocking block tiles as shown in the attached MRR-088	07/02/2016	08/02/2016	Α
IR-1300006-QBW-624A	Inspection of installation of all piping, fittings, valves, flow meter, pipe supports at Qabatiya and AL Zababde Metering Pad	08/02/2016	10/02/2016	С
IR-1300006-QBW-624B	Inspection of installation of all piping, fittings, valves, flow meter, pipe supports at Qabatiya and AL Zababde Metering Pad	29/02/2016	01/03/2016	С
IR-1300006-QBW-625A	Inspection for the delivered outdoor emergency eyewash as shown in the attached MRR-089	08/02/2016	08/02/2016	Α
IR-1300006-QBW-626A	Inspection of installation of coping stone for the parapet tops od disinfection and electrical buildings	08/02/2016	09/02/2016	Α
IR-1300006-QBW-627A	Inspection of roof insulation works for living quarter and disinfection buildings	08/02/2016	09/02/2016	А
IR-1300006-QBW-628A	Inspection of installation floor tiles for chlorination building	08/02/2016	09/02/2016	А
IR-1300006-QBW-629A	Inspection of installation chlorination system in chlorination building	09/02/2016	10/02/2016	Α
IR-1300006-QBW-630A	Inspection of formwork and reinforcement of sliding gate beam	10/02/2016	10/02/2016	А
IR-1300006-QBW-631A	Inspection of installation of interlock tile in the site.	11/02/2016	11/02/2016	С
IR-1300006-QBW-631B	Inspection of installation of interlock tile in the site.	25/02/2016	25/02/2016	Α
IR-1300006-QBW-632A	Inspection for the delivered stainless steel ladders for buildings of Qabatiya Pump Station as shown in the attached MRR-090.	14/02/2016	14/02/2016	Α
IR-1300006-QBW-633A	Inspection for the delivered galvanized steel sections for boosters' shed as shown in the attached MRR-091.	14/02/2016	14/02/2016	Α
IR-1300006-QBW-634A	Inspection for the monthly Environmental checklist for December 2015	14/02/2016	15/02/2016	Α
IR-1300006-QBW-635A	Inspection for the monthly Environmental checklist for January 2016	14/02/2016	15/02/2016	Α
IR-1300006-QBW-636A	Inspection of installation of fence and chain link around transformer pads	15/02/2016	16/02/2016	Α
IR-1300006-QBW-637A	Inspection of installation of electrical manholes as per the attached drawing	16/02/2016	16/02/2016	Α
IR-1300006-QBW-638A	Inspection of installation of lighting pole as per the attached drawing	16/02/2016	16/02/2016	Α
IR-1300006-QBW-639A	Inspection of installation of security screen for the windows of living quarter as per the attached drawing	17/02/2016	17/02/2016	А
IR-1300006-QBW-640A	Inspection of milling areas along the conveyance system and preparation works prior to asphalting as per the attached drawing	18/02/2016	21/02/2016	А
IR-1300006-QBW-641A	Inspection of safety signs and precautionary traffic arrangements along the conveyance system prior to start the asphalting areas	18/02/2016	21/02/2016	А
IR-1300006-QBW-642A	Inspection of installation of fence at top of retaining wall, as per attached drawing	21/02/2016	22/02/2016	С
IR-1300006-QBW-643A	Inspection for the delivery and installation of checkered plates at booster station area, according to attached drawing and MRR-092.	21/02/2016	22/02/2016	С
IR-1300006-QBW-644A	Inspection of installation external ladders for buildings (electrical buildings, chlorination and living quarter)	21/02/2016	22/02/2016	С
IR-1300006-QBW-645A	Inspection galvanized steel door of electrical metering and electrical control buildings	21/02/2016	22/02/2016	Α
IR-1300006-QBW-646A	Inspection of installation of plumping equipment's and piping for living quarter	21/02/2016	23/02/2016	С
IR-1300006-QBW-647A	Inspection of finish site grading and preparation at Qabatiya well pump site	23/02/2016	23/02/2016	А

IR-1300006-QBW-648A	Inspection of finish site demolition, removal, clear and grub site	23/02/2016	24/02/2016	Α
IR-1300006-QBW-649A	Inspection for the installation of portable air compressor near the bladder surge tank.	24/02/2016	retracted 25/2	/ 2016
IR-1300006-QBW-649A	Inspection for the installation of portable air compressor near the bladder surge tank.	29/02/2016	01/03/2016	Α
IR-1300006-QBW-650A	Inspection for civil site miscellaneous level excavations	24/02/2016	24/02/2016	Α
IR-1300006-QBW-651A	Inspection of base course levels at the well yard prior to asphalting works (as per the attached drawing)	25/02/2016	28/02/2016	Α
IR-1300006-QBW-652A	Inspection for the installation and termination of transmission booster pumps power cables and control wires as per the attac	28/02/2016	01/03/2016	Α
IR-1300006-QBW-653A	Inspection for the installation and termination of miscellaneous power and control wires as per the attached drawing	28/02/2016	01/03/2016	Α
IR-1300006-QBW-654A	Inspection for installation of surge tank as per the attached certificate of proper installation	29/02/2016	01/03/2016	C
IR-1300006-QBW-655A	Inspection of installation of air release valve as per the attached drawing	29/02/2016	01/03/2016	Α
IR-1300006-QBW-656A	Inspection of installation of flanged gate valves at St.1+158.594 & St.2+656.945 (as per the attached drawing)	29/02/2016	01/03/2016	Α
IR-1300006-QBW-657A	Inspection of installation of washout chambers(as per the attached drawings)	29/02/2016	01/03/2016	Α
IR-1300006-QBW-658A	Inspection of installation valves, fitings, pipes water meter and others for connection chambers of AL Zababdi and AUJ (as pe	29/02/2016	01/03/2016	С
IR-1300006-QBW-659A	Inspection of the upgrading the existing Aqaba and Raba Chambers(as per the attached drawings)	29/02/2016	01/03/2016	С
IR-1300006-QBW-660A	Inspection of finish FC Deckguard coat for exterior walls of balance tank	29/02/2016	01/03/2016	С

Appendix
Equipment List

	USAID Contract No.: AI		
0-1	Task Order No.: AID-		
Qa	batiaya Well Pump Station A Equipment List-F		
Backhoe/Idle	01/02/2016	JCB	2011
Bobcat	01/02/2016	CAT	2013
Roller	01/02/2016	BOMAG	1997
Welding machinen	01/02/2016		
Backhoe/Idle	02/02/2016	JCB	2011
Bobcat	02/02/2016	CAT	2013
Roller	02/02/2016	BOMAG	1997
Welding machinen/Idle	02/02/2016	DOWAG	1557
Backhoe/Idle	03/02/2016	JCB	2011
Bobcat	03/02/2016	CAT	2013
Roller	03/02/2016	BOMAG	1997
Welding machinen/Idle	03/02/2016	DOWAG	1557
		100	2044
Backhoe/Idle	04/02/2016	JCB	2011
Bobcat	04/02/2016	CAT	2013
Roller/Idle	04/02/2016	BOMAG	1997
Concrete vibrator	04/02/2016	ICD	2011
Backhoe/Idle	05/02/2016	JCB	2011
Bobcat	05/02/2016	CAT	2013
Roller	05/02/2016	BOMAG	1997
Backhoe/Idle	06/02/2016	JCB	2011
Bobcat	06/02/2016	CAT	2013
Roller/Idle	06/02/2016	BOMAG	1997
Welding machinen	06/02/2016		
Backhoe/Idle	07/02/2016	JCB	2011
Bobcat/Idle	07/02/2016	CAT	2013
Roller/Idle	07/02/2016	BOMAG	1997
Welding machinen/Idle	07/02/2016		2211
Backhoe/Idle	08/02/2016	JCB	2011
Bobcat/Idle	08/02/2016	CAT	2013
Roller	08/02/2016	BOMAG	
Backhoe/Idle	09/02/2016	JCB	2011
Bobcat/Idle	09/02/2016	CAT	2013
Roller	09/02/2016	BOMAG	1997
Backhoe/Idle	10/02/2016	JCB	2011
Bobcat/Idle	10/02/2016	CAT	2013
Roller	10/02/2016	BOMAG	1997
Backhoe/Idle	11/02/2016	JCB	2011
Bobcat/Idle	11/02/2016	CAT	2013
Roller/Idle	11/02/2016	BOMAG	1997
Backhoe/Idle	12/02/2016	JCB	2011
Bobcat/Idle	12/02/2016	CAT	2013
Roller/Idle	12/02/2016	BOMAG	1997
Backhoe	13/02/2016	JCB	2011
Bobcat/Idle	13/02/2016	CAT	2013
Roller/Idle	13/02/2016	BOMAG	1997
Backhoe/Idle	14/02/2016	JCB	2011
Bobcat/Idle	14/02/2016	CAT	2013
Roller/Idle	14/02/2016	BOMAG	1997
Backhoe/Idle	15/02/2016	JCB	2011
Bobcat/Idle	15/02/2016	CAT	2013
Roller/Idle	15/02/2016	BOMAG	1997

Backhoe/Idle	16/02/2016	JCB	2011
Bobcat/Idle	16/02/2016	CAT	2013
Roller/Idle	16/02/2016	BOMAG	1997
Milling machine	16/02/2016	Wirtgen	2013
Backhoe/Idle	17/02/2016	JCB	2011
Bobcat/Idle	17/02/2016	CAT	2013
Roller/Idle	17/02/2016	BOMAG	1997
Milling machine	17/02/2016	Wirtgen	2013
Backhoe	18/02/2016	JCB	2011
Bobcat/Idle	18/02/2016	CAT	2013
Roller/Idle	18/02/2016	BOMAG	1997
Milling machine	18/02/2016	Wirtgen	2013
Backhoe/Idle	19/02/2016	JCB	2011
Bobcat/Idle	19/02/2016	CAT	2013
Roller/Idle	19/02/2016	BOMAG	1997
Milling machine	19/02/2016	Wirtgen	2013
Backhoe/Idle	20/02/2016	JCB	2011
Bobcat/Idle	20/02/2016	CAT	2013
Roller/Idle	20/02/2016	BOMAG	1997
Asphalt finisher	20/02/2016	BITELLI	2000
Milling machine	20/02/2016	Wirtgen	2013
Backhoe/Idle	21/02/2016	JCB	2013
Bobcat/Idle	21/02/2016	CAT	2013
Roller/Idle	21/02/2016	BOMAG	1997
Asphalt finisher/Idle	21/02/2016	BITELLI	2000
Backhoe/Idle	22/02/2016	JCB	2011
Bobcat/Idle	22/02/2016	CAT	2011
Roller/Idle	22/02/2016	BOMAG	1997
Asphalt finisher/Idle	22/02/2016	BITELLI	2000
Backhoe/Idle	23/02/2016	JCB	2011
Bobcat/Idle	23/02/2016	CAT	2011
Roller/Idle	23/02/2016	BOMAG	1997
Asphalt finisher/Idle	23/02/2016	BITELLI	2000
Backhoe/Idle	24/02/2016	JCB	2011
Bobcat/Idle	24/02/2016	CAT	2013
Roller	24/02/2016	BOMAG	1997
Backhoe	25/02/2016	JCB	2011
Bobcat/Idle	25/02/2016	CAT	2013
Roller	25/02/2016	BOMAG	1997
Backhoe/Idle	26/02/2016	JCB	2011
Bobcat/Idle	26/02/2016	CAT	2011
Roller/Idle	26/02/2016	BOMAG	1997
Backhoe/Idle	27/02/2016	JCB	2011
Bobcat	27/02/2016	CAT	2011
Roller	27/02/2016	BOMAG	1997
Asphalt finisher	27/02/2016	BITELLI	2000
Backhoe/Idle		JCB	2000
Bobcat	28/02/2016 28/02/2016	CAT	2011
Roller	28/02/2016	BOMAG	1997
Mobile crane	29/02/2016	IVECO	2009
Backhoe	29/02/2016	JCB CAT	2011 2013
Bobcat	29/02/2016		
Roller	29/02/2016	BOMAG	1997
Asphalt finisher	29/02/2016	BITELLI	2000
Roller	29/02/2016	HAMM	2002
			}
			<b>!</b>

# Appendix Environmental Checklist



## USAID WEST BANK/ GAZA INFRASTRUCTURE NEEDS PROGRAM INPII CONTRACT NO. AID-294-I-00-12-0001 TASK ORDER NO. AID-294-TO-13-00006 QABATIYA WELL PUMP STATION AND CONVEYANCE SYSTEM (QBW)



	s: Murad Daoud / Mohammed Thweib							
	Inspector: Murad Daoud	Vac/Na/			Date of Inspection:	February 10, 2016		
No.		Yes/No/ NA	Remarks by CMC	Date	Action by Contractor	Date	Resolved by Contractor	Date
1	General							
1.A	Health, Safety, and Environmental Plan and first aid kit is onsite	Yes						
1.B	Temporary Utilities: toilet facilities; covered water kegs; shade are provided	Yes	Hygenic conditions at toilet facility needs improvement		Concurred. Corrective action has been taken	10-Feb-16		
1.C	Air Quality Control: Dust and sand emissions are minimized	Yes	,		occii takcii			
1.D	Noise and Vibration Control: control measures are implemented	Yes						
1.E	Waste Management: Good housekeeping; sub-contractors are aware of waste procedure for hazardous and non-hazardous waste (appropriate disposal sites and proper management and reporting of accidental spills or discharges of hazardous waste)	No	Enhance houskeeping practices onsite. Remove all emtpy cans and material containers and dispose safely	February 10, 2016	Concurred. Corrective action has been taken	10-Feb-16		
1.F	Fire Protection and Prevention: Inspect fire station and flammable storage; signs should be posted for designated smoking and no smoking areas	Yes						
1.G	Personal Protection Equipment (PPE): Workers have proper PPE for task	Yes	Enforce that all workers onsite are utilizing proper PPEs		Concurred	10-Feb-16		
1.H	Safety Procedures are in place for all that are applicable: Scaffolding, towers, and platforms; excavation; existing underground and above ground facilities; portable electromechanical tools; vehicles and transportation equipment; ladder use; confined space entry; and lockout/tag out	Yes						
2	Construction Noise, Heavy Machinery and Equipment							
2.A	Minimize use of heavy equipment and machinery whenever possible.	Yes						
2.B	Traffic Control: Barricades, traffic cones, warning signs, lights, flagmen, and other safety devices and staff as applicable in accordance to local authority requirements	No	Waring signs and barricades have to be provided around the entrance of the project site		Concurred.	10-Feb-16		
2.C	Provide well-maintained construction equipment, vehicles and machinery to minimize pollutant emissions.	Yes						
2.D	Install and maintain mufflers on all machinery. Limit and control machinery movement within and around work site.	Yes						
2.E	Limit the operation of noisy, heavy equipment between the hours of 6:00 pm to 6:00 am and during Friday and other official holidays.	NA						
2.F	Prevent oil and fuel leaks by eliminating the cause and sources of leaks and by continuous check.	Yes						
2.G	Abide by local laws and ordinances concerning speed, weights of vehicles that transport construction materials to and from construction, storage and quarry sites in order to maximize safety and minimize environmental hazards such as traffic accidents, pavements damage or excess dust generation.	Yes						
2.H	Intermittent noisy activities should be scheduled to minimize exposure of neighboring areas to high levels of construction noise. For example, noisy activities could be scheduled at times coinciding with periods when the schools are likely to be unoccupied. Prolonged operation of noisy equipment close to the schools should be avoided.	Yes						
2.1	Idle equipment should be turned off or throttled down. Noisy equipment should be properly maintained and used no more often than is necessary.	Yes						
2.ј	Construction activities should be planned so that parallel operation of several sets of equipment close to a given receiver is avoided.	Yes						
2.K	Where possible, the numbers of concurrently operating items of plant should be reduced through sensitive programming.	Yes						
2.L	Construction plant should be properly maintained and operated. Construction equipment often has silencing measures built in or added on, e.g. compressor panels, and mufflers. Silencing measures should be properly maintained and utilized.	Yes						
2.M	Provide workers with Protective hearing devices and breathing masks.	Yes						
	Traffic Management							
3.A	Prepare a traffic plan to be approved by the CMC for management of traffic during construction. Particular attention to heavily traveled sections of the road which include pedestrian traffic.	Yes	,					
3.В	Manage and control construction activities to minimize traffic disruption and possible delays in the construction zone area.	Yes						
3.C	Plan and provide temporary alternative lanes and routes to allow passage of traffic with minimum delay, disruption and maximum safety.	NA						

N o.		Yes/No/ NA	Remarks by CMC	Date	Action by Contractor	Date	Resolved by Contractor	Date
3.D	Utilize flagmen and other appropriate means to direct traffic safely and minimize conflicts between public and construction traffic.	No	Contractor shall provide flgman where ever needed	February 10, 2016	Concurred.Flagmen are provided at site's entrance during entrance of heavy vehicles	10-Feb-16		
3.E	Coordinate with all concerned parties, such as DCL, local authorities, municipalities, local councils, and local police department for all planed construction activities.	Yes						
3.F	Coordinate with local authorities emergency routes to allow medical and public safety services to be delivered to the work site and through it to the public at large.	Yes						
3.G	Provide all area map showing closest medical, emergency, police and fire services.	Yes						
4	Health and Safety	Yes						
4.A	Prepare a Safety Plan and submit to the CMC for approval.	Yes						
4.B	Implement safety measures to protect workers, public (vehicular and pedestrian) from possible injury and adjacent property from damage.	Yes						
4.C	Implement safety measures during the road construction by providing temporary bridges, safe pathways and hand rails and other safety measures during the road construction.	No	Safety measures regarding road construction need to be improved	February 10, 2016	Concurred. Corrective action has been taken	10-Feb-16		
4.D	Provide measures to define and isolate construction zones by using warning signs, fencing and ribbon barriers	No	Contractor shall isolate as possible the construction areas. Maintain the warning signs and fences around the project site. Maintain safe access for the project site	February 10, 2016	Concurred. Corrective action has been taken	10-Feb-16		
4.E	Provide appropriate measures to prevent unauthorized persons from entering the work area. Provide all workers with hard hats, hearing protection, bright colored vests, goggles, and other personal protective equipment (PPE) as needed and required.	NA						
4.F	Provide map(s) to nearest medical and public safety facilities including telephone numbers in case of illness or a construction accident.	Yes						
4.G	Fixed or Portable Toilets shall be provided wherever needed for the use of employees.	Yes	Improve the hygenic conditions of the toilets onsite		Concurred. Corrective action has been taken	10-Feb-16		
4.H	The contractor shall provide temporary shoring as appropriate and needed.	Yes						
5	Dust Control	NA						
5.A	Utilize dust palliative such as calcium chloride and/or wetting by water application to minimize and control dust migration from construction site, quarries and storage areas.	Yes						
5.B	Spray water using water tanks whenever needed to assure minimization of dust migration	Yes						
5.C	The working area for the uprooting of trees, shrubs or vegetation or for the removal of boulders, poles, pillars or temporary or permanent structures shall be sprayed with water or a dust suppression chemical immediately.	Yes						
3.13	All demolished items (including trees, shrubs, vegetation, boulders, poles, pillars, structures debris, rubbish and other items arising from site clearance) that may dislodge dust particles shall be covered entirely by impervious sheeting or placed in an area sheltered on the top and the 3 sides within a day of demolition.	Yes						
	Immediately before leaving a construction site, every vehicle shall be washed to remove any dusty materials from its body and wheels.	Yes						
5.F	Where a vehicle leaving a construction site is carrying a load of dusty materials, the load shall be covered entirely by clean impervious sheeting to ensure that the dusty materials do not leak from the vehicle. At least 50cm of freeboard vertical distance will be maintained between the top of the load and the top of the trailer sides on Truck hauling dirt, soil or loose materials off the site.	NA						
5.G	Vehicle speed within the worksite shall be limited to 10 kph, except for properly formed and maintained access roads.	Yes						
5 H	The concrete batching plant shall be located away from any air sensitive receiver as far as practicable.	Yes						
5.1	Cement delivered in bulk shall be stored properly and covered to eliminate dust migration.	NA						
5.J	The working area of any excavation or earth moving operation shall be sprayed with water or a dust suppression chemical immediately before, during and immediately after the operation so as to maintain the entire surface wet.	NA						
5.K	Exposed earth shall be properly treated by compaction, turning, hydro seeding, vegetation planting or sealing with latex, vinyl, bitumen, shotcrete or other suitable surface stabilizer within 6 months after the last construction activity on the construction site or part of the construction site where the exposed earth lies.	NA						
6	Land Use	NA	•			1		
6.A	All work will occur in designated Right-Of-Way (ROW) of the road. No encroachment on private land.		Remove piled material on nearby lands		concurred. These materials have been moved to approved damping areas.	10-Feb-16		
6.B	Maximum effort will be provided to protect existing trees along the ROW of the construction zone especially Mature olive trees.	No	Protect nearby olive trees		Concurred.	10-Feb-16		

N o.		Yes/No/ NA	Remarks by CMC	Date	Action by Contractor	Date	Resolved by Contractor	Date
6.C	All trees will be sprayed with water periodically to clean them and prevent harm that may be caused by the dust due to construction operations.  Maximum efforts will be also provided to avoid uprooting trees.	Yes						
6.D	In the event a tree is planted illegally in the ROW of the road, the tree will be removed and replanted elsewhere in coordination with the CMC and local village councils.	NA						
7	Historical Sites							
7.A	Maximum effort and action will be taken to protect known historical sites. Protection measures will be coordinated with the Ministry of Tourism and Antiquities.	Yes						
7.B	Upon discovery of an historical/cultural site, construction operations will be halted immediately. The Ministry of Tourism and Antiquities will be contacted to evaluate the discovery.	NA						
7.0	Resume construction operation upon determination by the Ministry of Tourism and Antiquities of the discovered site. Proceed upon approval of CMC and the Palestinian authorities.	NA						
8	Biodiversity Conservation							
8.A	Protection of adjacent fertile agricultural land and wild life will be maintained by limiting the construction operations to the designated road ROW.	No	Protect exiting nearby agricultural lands		Concurred.	10-Feb-16		
8.B	Minimize the noise and dust levels to preserve wild life existent along the road areas.	NA						
9	Material Extraction							
9.A	Utilize materials that meet the project specification from local cuts that produce durable aggregate for both stabilization and erosion control.	Yes						
9.B	Keep photographic record of existing conditions to restore site(s) to original characteristics and conditions.	Yes						
9.C	Develop a Construction Risk Management Program (CRMP) including video recording of road and adjacent areas and restore affected areas to original conditions.	Yes						
	Stockpile and sort excavated materials and reuse for restoration and reshaping of areas along the ROW.	NA						
10	Filling							
10.A	In areas where extensive excavation and filling are carried out, temporary earth bunds should be built. Sand bags may be used to confine the runoff or wastewater generated from the construction activities	NA						
10.B	Excavation works should be minimized in rainy season.	NA						
10.C	Open stockpiles of construction materials and dusty materials should be covered with tarpaulin during rainstorms. These materials should not be placed near the stream courses. This avoids the release of materials into the stream water.	Yes						
10.D	The process of trench and hole digging should be in short sections. Trenches and holes should be immediately backfilled after the completion of a section of works to minimize the inflow of rainwater during rainstorms.	NA						
10.E	The channel system (if necessary) to collect the runoffs in the construction sites should be well designed prior to the commencement of the site formation works.	NA						
10.F	Provisions of drains at the lowest points of the sites could effectively collect the runoff. Site and sand traps, which remove large soil particles in the runoffs, should be provided in the channels. Regular maintenance and cleaning of the channels would ensure that the channel system is in good condition and is not obstructed by sediments.	NA						
	Wastewater generated from the vehicle wheel washing facilities should be recycled wherever practicable.	NA						
11	Utility Services							
11.A	Noisy/disruptive operations to be stationed away from surrounding public/private structures	Yes						
11.B	Soil erosion and other measures as necessary to be implemented to protect adjacent land(s) from effects of	No	Prohibit throwing waste material at nearby lands that may cause		Concurred.	10-Feb-16		
11.C	Coordinate possible disruption to existing utilities with local authorities. Relocate utilities if necessary prior to starting of construction to minimize disruption.	NA	soil polution					
11.D	Public underground infrastructure such as sewer, manholes etc. will be located in the immediate vicinity of the site burlap to protect from possible construction effects.	NA						
11.E	Direct heavy construction traffic away from possible shallow sewer, water & other possible underground lines.	Yes						
11.F	When using cranes, a clear path to be determined by the project manager to avoid possible damage to overhead lines.	Yes						
11.G	Stumps, Spoils, Debris and Other Materials Clean up the stump resulting from road construction. Contractor to keep construction area at site and surrounding areas in a neat clean condition and free from any accumulation of Rubbish.	NA						

No.		Yes/No/ NA	Remarks by CMC	Date	Action by Contractor	Date	Resolved by Contractor	Date
11.H	If a material is to be disposed of on-site, such material wil be covered with fill and topsoil.	NA NA						2.10
11.1	Provide approved designated protected areas for storage of spoil material, such as asphalt and concrete. Measures to be taken for the removal of waste materials to the approved disposal sites. Waste materials not to be burned. Disposal of excavated materials, particularly existing Asphalt shall be environmentally friendly.	No	Enhance the waste handling within and around the project site. Wastes were observed within and around the project site		Concurred. Waste is disposed in large containers and transferred to damping areas.	10-Feb-16		
12	Site-Specific Concerns:							
12.a	Contractor shall close the Environmental issues mentioned above before the end of the month, delaying issues from one month to the next month will increase the environmental effects on the construction site.							
12.b	Maintain the implementation of safety and traffic plans	No						
12.c	Improve the waste management practices	No						
12.d								

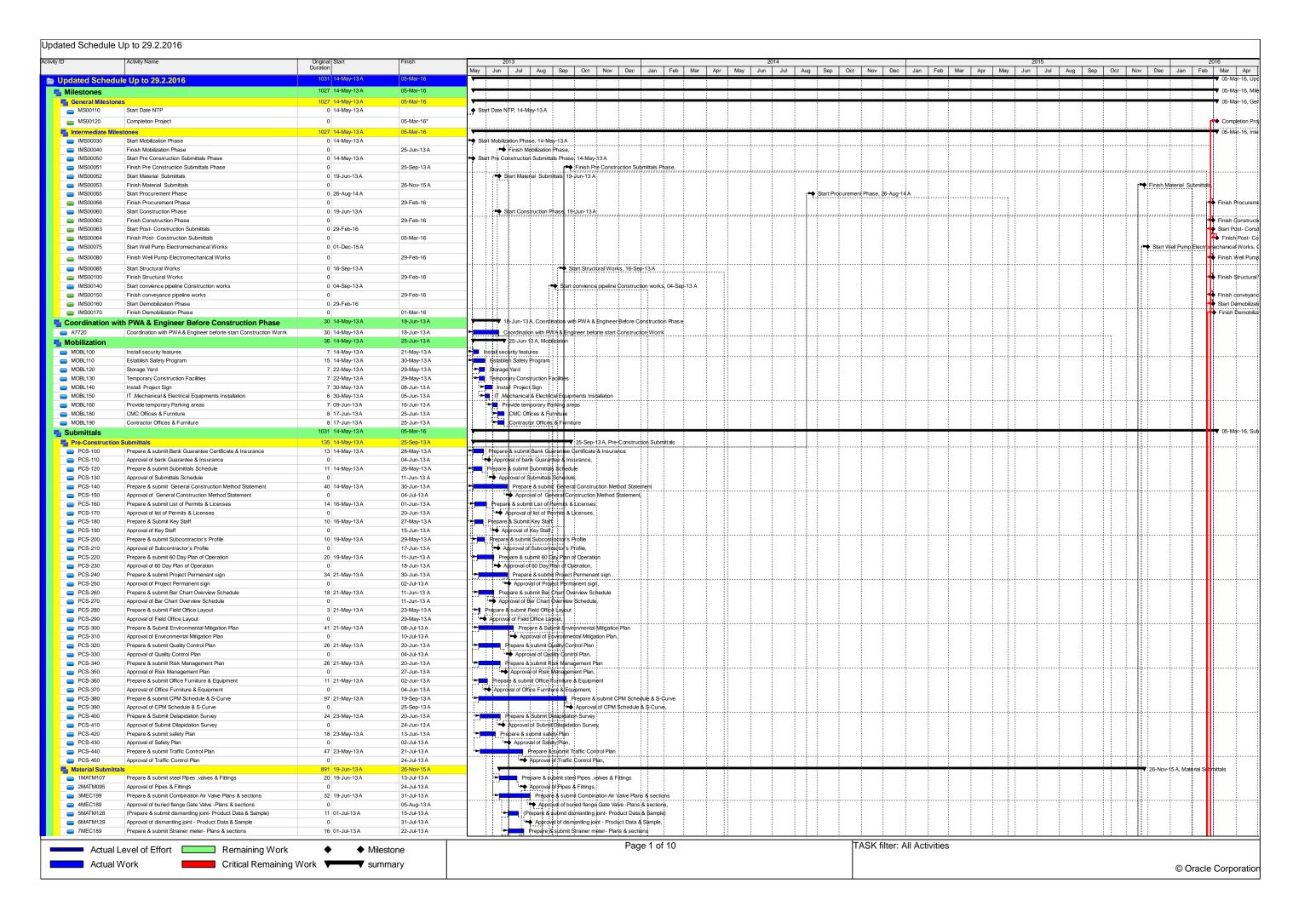
CMC representative:

Murad Daoud

Contractor representative:

**Appendix** 

**Updated Schedule** 



© Oracle Corporation

